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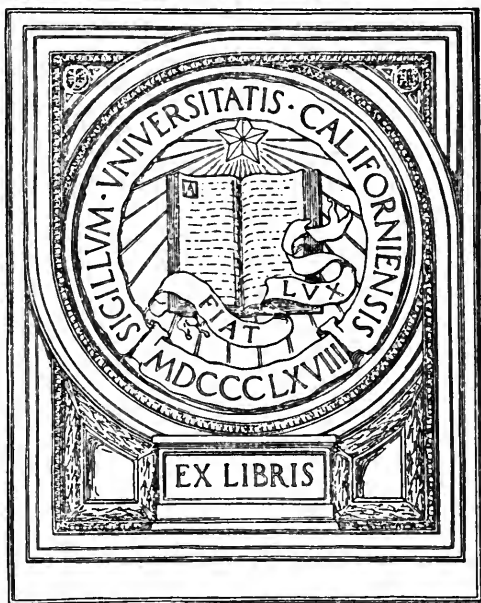
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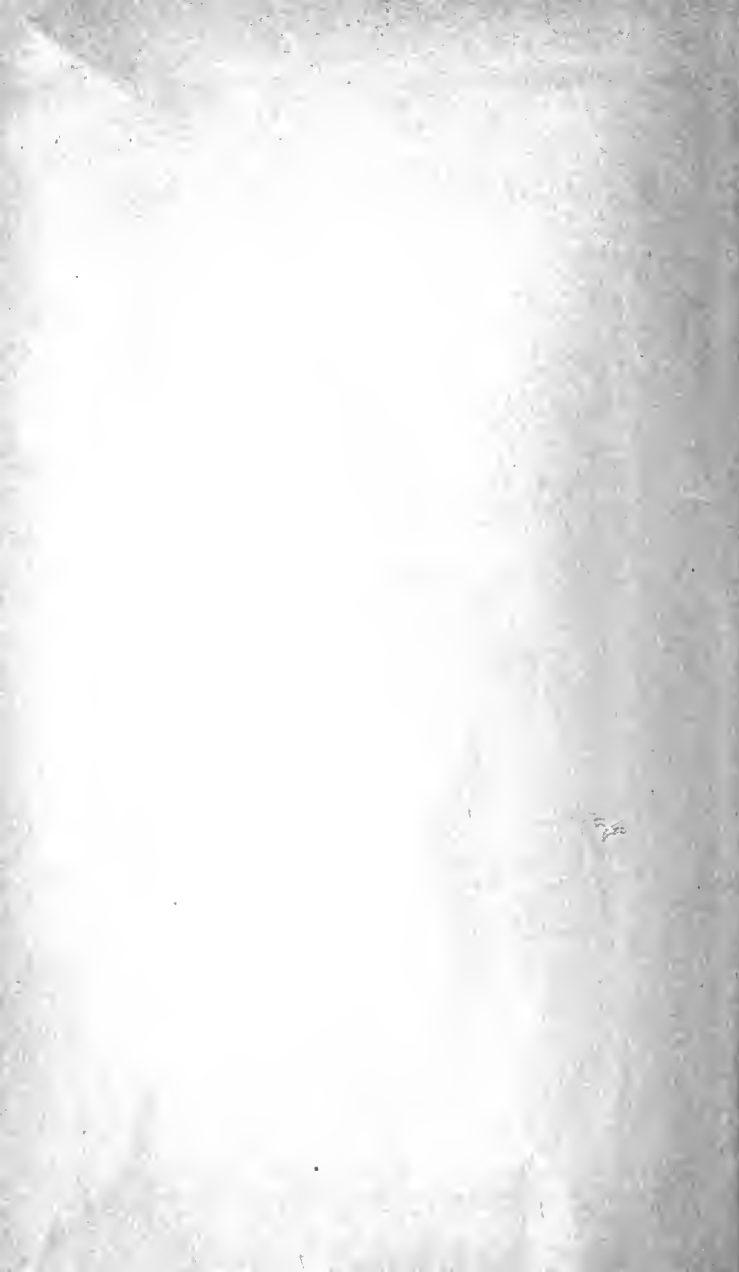


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J. M. Moncada

The Social World

Translated by
ALOYSIUS C. GAHAN

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The Social World

TRANSLATED INTO ENGLISH

BY

ALOYSIUS C. GAHAN

The author begs all, believers or nonbelievers, to read this book tolerantly. It is the expression of a sincere conviction.

There is in existence an eternal poem, written in space and in the firmament, whose meaning was grasped by man upon the awakening of his intellect. Genesis, speaking of creation, has condensed this poem into the two simple words:

FIAT LUX

This phrase is the most eloquent, profound, true and suggestive that has ever been written upon earth. It is the sum and substance of life and eternity in matter and spirit.



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It is inferred that there exists in man what may be termed an instinct of personal rights—a feeling that leads him to claim as great a share of natural privileges as is claimed by others—a feeling that leads him to repel anything like an encroachment upon what he thinks his sphere of original freedom. By virtue of this impulse, individuals, as units of social mass, tend to assume like relationships with the atoms of matter, surrounded as these are by their respective atmospheres of REPULSION as well as of ATTRACTION. And perhaps social stability may ultimately be seen to depend on the due balance of these forces.

—HERBERT SPENCER, "Social Statics."

The Social World

CHAPTER I.

ANCESTRAL AGES.

THE evolution of the species is no longer debated by scientists. Darwin and his successors have established the truth of evolution with respect to all things and all beings. Man is the child of nature itself. He is an animal, spiritualized through work and selection. It is living matter that functions, thinks and speaks.

Science also demonstrates that life manifests itself in different grades in the beings and things that constitute creation, in the same way as intelligence is graded in animals. Marble consists of particles, or atoms, which are in a state of constant movement. The infinitely small particles of matter have placed themselves in juxtaposition in millions and millions of forms, and from the manner of their union all beings and things have proceeded.

Therefore, the stone that we tread upon in the street is a living mass, for if movement constitutes life the stone lives, since it is constantly agitated by invisible convulsions. With the aid of powerful lenses, we might behold the movement, the union, the polarization of its particles. It looks as if it were composed of a compact

mass; but, nevertheless, an infinite network of pores separates its molecules. Everything in the world, then, is the result of development or evolution, which is a process of indefinite perfection. Nature copies, changes, and reproduces itself, raising the grades of matter and elevating the intelligence of animals.

Sensation, or the impression communicated by touch to beings at the bottom of the scale, has become differentiated in transmission from one species to another, and has multiplied and manifested itself in what we understand as the senses. These, in turn, have produced intelligence. Intelligence is reaching its highest degree of development in man.

What has given rise to these phenomena? Evolution. Man is the best organized of all organized beings.

If organization be adaptation, and if organization and adaptation perfect themselves in the course of the ages, we must suppose, or rather the conclusion is forced upon us, that man appeared upon the planet almost at the same time as the antediluvian animals; that he appeared in another form and with other organs. The first form in which he appeared was, however, the seed or essence and root of humanity as it now exists.

We are able to verify this process of evolution, historically and prehistorically, back to a certain point. Anthropology has disinterred ancestral man, and has arrived at the conclusion that he was as a being of another species and of another race. In the most remote ages there must have been much mingling of man with the other ani-

imals, on account of the mode of life. Existence was passed in the open air, exposed to the tempest. Man used his teeth, nails and limbs in combat with other animals. He did not bury his dead. In the fields he encountered the remains of his fellow-kind and grieved awhile, as the sheep does in the meadow on smelling the bones of its companion. Man sought the woman, as the tiger seeks the tigress. He made his home in a cave, like the wild animals. He supported himself upon herbs and raw flesh. All animals were his enemies, except the woman with whom he lived and her young. Each tribe was formed of such couples, and their offspring multiplied like the herds of the Argentine pampas.

Man chiefly saw and heard. His other senses were truly embryonic. Sight and hearing came first. His sense of taste was very limited; that of touch, torpid; his smell, bestial. The foul odor of the dead which he kept in his cave troubled him not at all; he felt no pain from the scratches inflicted upon his hide by the thorns of the brambles; he found but little flavor in the herbs or the flesh that he devoured. But, on the other hand, he was blessed with sight, which enabled him to roam abroad and spy an enemy afar so that he might avoid him; his hearing was acute, that he might listen for footfalls. These two great senses were constantly exercised as a matter of necessity. As man was a beast he lived in urgent necessity of attacking his foe, or of defending himself. He was constantly attended by danger, surrounded by wild animals and reptiles, and waylaid by other men who were equal and similar to himself.

He required eyes for the struggle; ears to hear the noise, the tread of the tiger in the gloom. These were the earliest senses. They have been the source of intellectual development and the greatest aids to man in his combat with the elements and with other animals. Man's sense of hearing rendered him conscious of the noise of the hurricane, the crash of thunder, the echoes of the firmament. His sight enabled him to penetrate the gloom, the night, and even the very tempest with its torrents and cataracts falling from the clouds.

He took refuge in his cave when sight revealed any danger or when hearing apprised him of footfalls on the heath, or of the lion howling in the neighboring woods.

Thus were man's senses developed, through constant exercise day by day and night by night. Perception, like quantity in mathematics, began at nought, and units of perception were imperceptibly added, one by one and little by little. Chaos, nothing, nought were the beginnings of creation in all things, beings and worlds, and in the products of things, beings and worlds.

Civilized man verifies these truths in his examination of the races and tribes yet existing in a state of savagery. Their mode of life is truly brutal and primitive, but despite that fact they have keen sight and exquisite hearing, better, perhaps, than that of civilized man, as the latter develops his intelligence at the expense of his important senses. The man of the plains or woods recognizes the tread of his enemy, and the footprint in the sand of a brother or known relation; he can hear footsteps at remarkable

distances and he is wonderfully skilful in the knowledge of places and paths.

In these same savage tribes, the other senses are found in embryo. They have neither taste nor smell, nor is their sense of touch like that of a civilized man. The smell of a flower or the taste of a delicacy is, to these beings, without any appreciable difference.

Science would deduce singular teachings from an examination of the eye, and from its evolutionary development. The improvement of this great sense bears an intimate relation to the progress of civilization. As the field of material vision expanded the range of intellectual vision was proportionately widened.

With his eyes man could see the sun, the illuminator, which silvered the shadows every morning; he beheld the moon and the stars that filled the night with their lustre; the lightning, rushing like a snake along the mountain-tops, and preceding the clap of thunder. He saw, indeed, all visible objects, but in the dawn of his intelligence these produced no impressions save those of joy or terror, as happens in the case of cattle.

His sense of hearing enabled him to listen to the dread crash of the thunderbolt and to hear its echo in the forest; he could hear the howls of the tiger, the roar of the lion, the hiss of the serpent, and the footsteps of other animals, whether friends or enemies. He became fearful or joyful on perceiving these manifestations of nature, as a child experiences fear or pleasure at the cry or the caress of its mother, or as it dreads the darkness and loves the light.

These impressions at first affected the heart. They engaged the senses and the cerebrum as intermediaries. The vibrations penetrated to the vital centre by means of concentric waves. This initial exercise of the nerves and mind of man was entirely mechanical, but it gave rise to the development of the intellectual organs. The movement and propagation of the sensitive waves gave birth to the spirit. Man was like an electric battery, endowed with sensibility, gradually increasing in potential capacity and possessed of self-transmitting wire that multiplied its functions and applications. The machine became larger and more comprehensive through mere exercise and evolution, that is to say as the simple result of life itself. The human mind was endowed with living, galvanic current, and man, by degrees, acquired consciousness of his own power.

As impressions were transmitted from the eye to the organism, and the heart under their influence dilated or contracted, the circulation of the blood was affected and, in the first case, expansion or joyousness was produced, and in the other sadness, or a condition of fear was engendered. The former state encouraged health; the latter developed moral or physical weakness through constriction of the central viscera. This is the starting point of all human manifestations, moral and intellectual. Ingenuous and natural joy imparts life to the organism. Sadness and pain produce deterioration and premature death. Consequently the disposition of man, whether cheerful or sad, his temperament, idiosyncrasy, or soul, is formed by those impressions.

Man, at first, had a truly animal existence. His life was purely mechanical, beginning with embryonic sensations which, in the course of ages, have developed in accordance with the increase of the manifestations received through the senses.

Primitive man, therefore, felt first, and thought afterwards. Sensation was the spring, the germ of the human soul. Men who have felt and suffered most have the grandest souls. It were better, perhaps, to say that the heart and the coursing blood gave rise to sensations of joy or sorrow, and that these were the precursors of spiritual life. The soul is therefore a product of the relations existing between exterior objects and the human heart.

Hence, between the circulation of the blood and the intellectual manifestations there must exist an intimate relation, a contract of reciprocity, involving force, work, life and movement, constituting bonds which can be dissolved only by death.

Through sensation and the consequent expansion or repression of the blood, man learned to recognize psychic relations. He came to observe a difference between the joy produced within him by the light of the sun, and the sense of anguish and sadness he experienced in the evening twilight. From manifestations purely physical he passed to manifestations embryonically intellectual.

In the individual, joy and sadness operate in a diametrically opposite manner by reason of the influence of light upon the blood of organized beings. The former cheers and dilates the breast, increasing the flow of blood and con-

tributing to life; sadness, on the contrary, compresses the organism, restricts circulation and clutches at the heart.

The moral life of man is, therefore, reduced in principle to two great manifestations produced in the human heart by the sight of objects and things. These manifestations are joy and sorrow. They were the beginning of the moral world; the first breath of the soul.

We shall soon see that the world has progressed, and that men and nations have developed or succumbed, in conformity with these two great manifestations. They were also the origin of religions and civilizations.

We must not forget, however, that joy and sorrow, in their first form, were limited to the impression produced upon the heart by the dawn and by the evening twilight, that is to say by light and darkness.

It consequently appears that through the sense of sight, the physical world became transformed into the moral world. The eye is the luminous soul, born of a sunbeam, child of the golden-haired Father in the heavens, according to the simple concept of our progenitors. The eye is the true agent of spirituality upon the earth; the initial force that impels cerebral activity, but it must have light for the performance of its functions. Hence, when the shadow of the night descends upon us, the eye rests and sleeps.

The ear aids it to an extreme degree. A person congenitally blind and deaf is necessarily idiotic.

Primitive man lacked, also, articulate speech during a certain period of his development.

If all evolution begins by an embryo, the human voice at the beginning must have been a simple "moo," like that of inferior animals. The human creature gesticulated and made himself understood by means of facial expression and example.

Speech developed along with sensation. This phenomenon can be quite clearly appreciated at the present day.

Feeling produces eloquence, spoken or written. Savage tribes whose sensations are few, have but a very limited vocabulary. Newly formed languages are also deficient in words. Civilized man has moments of singular eloquence, when he is under the influence of a great sorrow or intense joy, or of some lofty ideal, interest or belief. At the same time it is to be observed that an excess of feeling is injurious to the organism. A very intense sorrow may render a man dumb, and extraordinary joy may cause him to shed tears. There is a psychic point at which it would seem that these two manifestations, joy and sorrow, combine and mingle. Both of these sensations affect the heart, and as this organ is injured by compression, it can also suffer from expansion beyond the limits of its capacity. We may, therefore, make the deduction, logically, that it was sensation, and the development of manifestations of the heart, that gave rise to human speech.

We have proof of this in the development of languages. The nations that have felt and suffered most, those who have experienced the greatest intellectual activity, have the richest vocabularies and were civilized in advance of

others. The Latin race possesses a magnificent tongue, capable of expressing the most varied sentiments, while the Saxon tongue is still mediocre, being with its almost guttural sound yet redolent of the forest.

This truth facilitates the study of languages and explains innumerable laws of philology.

Furthermore, it is not very difficult to understand that nature and all the enemies of man assisted him in his intellectual development; and that without exterior objects and the struggle for existence, the human soul would not have emerged from zero.

What immense application this truth has in teaching, and how it illustrates the cause of failure of the school which is merely instructive!

These truths further explain the changes which nations undergo when they abandon the road which has been indicated to them by nature.

If impressions and sentiments were the first awakeners of intelligence, nations subject to the greatest natural impressions and manifestations would necessarily make the greatest progress. If the diffusion of the spirit has considerable connection with the intellectual development of man, those nations would develop most which are situated in unobstructed regions, close to the sea, and in places having extensive and clear horizons.

The earliest people of the earth, the founders of civilization, must have existed where the struggle of man with nature was greatest, where the tiger and the lion and the serpent waylaid them, where the tempest obliged them to seek shelter, and the thunder and lightning frightened

them; where cold benumbed them; heat suffocated them, and where they were besieged by dangers upon all sides.

Seeking such a region, or regions, throughout the different lands of the world, we find those places which by a remarkable coincidence were the cradles of great civilizations, viz, the steppes of Pamir, the valley of the Ganges and of the Indus, Persia, Chaldea and Egypt.

In these lands man struggled against all of the elements and dangers of nature. He had to contend with tempests, violent hurricanes, torrential rains, lightning and thunder reverberating on the mountains and in the valleys, the scorching sun at certain periods, the cold at others, and with sudden and extreme changes. He also had to struggle against other enemies that awakened his intelligence, namely, the animals. There were the ferocious tiger, the agile and terrible lion, elephants, leopards, hyenas and jackals, vipers, serpents, plagues of mosquitos and other insects that produced death.

Man was surrounded by pests and he was obliged to be on his guard against them. The Aryan civilization, the greatest and most illuminating of the world, had its birth in this gigantic struggle. If from this terrible and frightful experience, sentiments, language, and intelligence sprang into existence through secular evolution, such a people were necessarily pioneers in progress and civilization. This they were, as history teaches. Their light, disinterred from the interior of Asia, illumines the world. Our great civilization had its birth in those regions. It was there that man acquired his earliest sensa-

tions, and there it was that the human soul was born beneath the rays of the sun.

By simply remembering the fact that the earth is various, and that it does not present the same difficulties and asperities to all people, we can readily understand that from the very dawn of society certain differences in aptitudes existed among individuals and peoples. The earth, or in other words nature, produced those remarkable differences in aptitudes in the various races.

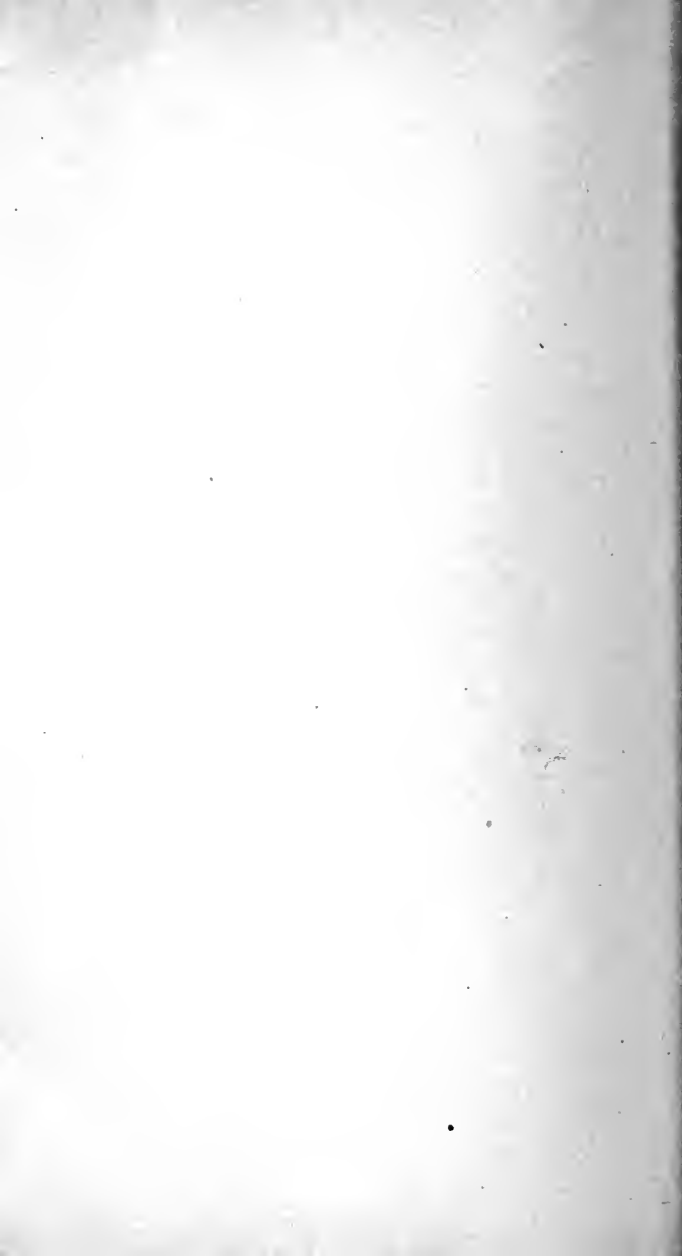
Nature also produced the differences in language. The foundations of the Tower of Babel were, indeed, laid in the bosom of the earth. Objects are not found uniformly scattered upon the planet, nor does the sight of them produce in men the same impressions and relations. Foods, beings, friends, and enemies were different, as well as the mode of life, and as the names bestowed upon these objects and beings constitute language, the idioms naturally varied. Each tribe, or rather each people, or race, developed in harmonious conformity with the elements by which they were surrounded, and the nature of the struggle they had to engage in to survive.

To arrive at these first germs of language and civilization, primitive humanity undoubtedly required long ages of evolution, the peculiar adaptation of their organs, the progressive development of their sensations and of mental capacity appropriate to collect and transmit external manifestations. It was an incessant, persevering struggle against the rebellious and wonderfully diversified elements of nature.

Society was also engendered in that struggle. Man felt that he was strong when he beheld

the woman and the child by his side. They were conscious of the darkness and its perils, and they nestled closer together within the cave. This was the foundation of society.

It was the germ of the nations, the true social bond. Hence, those who advocate free love and the complete demolition of social bonds are attacking the very foundations of society.



CHAPTER II.

THE INFLUENCE OF LIGHT UPON DIFFERENT CIVILIZATIONS.

READER, have you ever slept in the pathless woods? Have you not heard in the frightful solitude the weird murmur of a cascade, the rush of streams, the rustling of leaves disturbed by the crawling serpent, the song of a bird, distant, sharp and vibrating, the agitation of the breeze which seems to bear unseen spirits upon its passing wings? Have you not most ardently desired that night might end, and that the dawn with its beneficent sunlight might appear to brighten creation and free you from anguish and terror? However courageous you may be, a new life, happy and joyous, will come to you with the brightness of the day. At such a time you can realize how great an influence the sunlight must have had in the intellectual awakening of man.

No matter how great the intellectual capacity of modern man may be, the circumstances by which he is now surrounded are totally unlike those that surrounded his early progenitors in those ancient ages. Then the night must have seemed sadder, the darkness more frightful, the passage of the invisible spirits upon the wind more suggestive; the murmur of the fountain, the crackling of leaves, the song of the night-bird, must have been all laden with mystery. The return of day, therefore, was exceedingly agree-

able, and the Sun, the great Father who saved man from the horrors of darkness, was hailed with adoration. Man loved and made a divinity of the light that relieved him from the sinister dangers of the night, the silent desolation, the wild beast lying in ambush, and from the reptile's bite.

The drama of primitive ages could not be written or sung by modern man, as it was by the Sanscrit and the Zend poets. To them that drama was palpable; they felt and interrogated it with heart and head. They sought refuge in the cave or the hovel, with the beloved companion and the dear children, when the curtains of night were drawn and darkness fell upon the firmament. They had no candle, no gas, no beautiful electric light to convert night into day and dissipate the shadows. Ancestral ages, therefore, were marked by greater development of sensation and by the adoration of the light of the sun. Man went upon his knees every morning, and with arms extended towards the East offered fervent thanks to the Sun God who had come to illuminate the earth.

To reach even this point, ages of sentimental and intellectual evolution were, perhaps, required. Through uncountable years man had beheld the light of the sun, in the same way as it may be viewed by a colt which becomes joyful at day-break, and begins to stretch its limbs and runs and gambols in the meadows and fields, feeling the blood coursing through its members. It does not understand; it merely feels the beneficial effect produced within it by the bright rays of the sun.

We cannot calculate the time, the long period of intellectual gestation, during which man felt, loved and then adored the light of day. It first penetrated his being through his eyes, bringing with it a sweet sense of comfort, and an awakening to his heart and brain, thus creating restorative movement in the circulation of the blood.

Centuries must have passed before man acquired any definite knowledge of these relations, and there were very marked differences in the perception of these relations by the different races, on account of the variety of the phenomena and the degrees of intellectual development. The darker and more dangerous the night, and the greater and more terrible the enemies of man, the more joyful must have been his awakening and the more intense his love of light.

Individuals and races that developed under such circumstances, awoke to intelligence and civilization with greater force, facility and vigor. To feel deeply is the true and powerful seed of intelligence.

On the other hand, the individual or the race reared in misty places, where the difference between day and night is seemingly inappreciable, is always less apt to comprehend the phenomenon of the sun.

Consequently this sun-worship was relative, and it was connected with the character, aspect, and topography of the land where the individual dwelt, and also with the elements and dangers that surrounded him during the night. In places where pests, serpents, tigers, were scarce, man suffered but little, and his intellectual development was accordingly slower.

This fact must be recognized and understood as a reflex of the ancestral age, in the soul of every nation and race now existing, and as having left thereon impressed a marked and indelible trait. The character, temperament, tendencies and aptitudes of each social nucleus, that is to say, its preponderating qualities, had their roots in that ancient life; and in evident conformity with these circumstances and elements, we find a difference in intellectual development and in the habits of the Indians, Chaldeans, Persians, Egyptians, Assyrians, Greeks and Romans of antiquity.

There was a marked difference in physical and intellectual development, in character and temperament, between the inhabitant of the mountain and the dweller on the plain, between the children of river-valleys and those of the desert, between the child reared upon continental land and the man whose life was confined to an island. Even in the matter of food there was great diversity. Some lived upon fish, others on vegetables, while others subsisted upon flesh. This latter article of diet was first used raw. Cooking came with progress and civilization.

Nature sowed the seed, diversified and formed the special characters and tendencies of individuals, families and nations. It divided, varied and ramified the social world to an extraordinary degree. The sky and the horizons of the land awakened man and enlivened his intelligence in a greater or lesser degree, depending upon the phenomena which he observed.

All this clearly shows that without the stimulus of nature, and without struggles, there could not have been intellectual development. This ex-

plains the failure of the sedentary life, and of the school that keeps the child in permanent inactivity.

Considered from the view-point of intellectual development, those were glorious individuals and peoples who lived surrounded by large, wild animals, or great and terrible reptiles, and who were subject to dreadful winds and tempests and the thundering of the clouds, for they bequeathed to the world the light of civilization. From the fire of the sun they caught the flame that illumined human intelligence. Gazing into the depths of space, and beholding the firmament with greater clearness, they knew and understood the universe better.

These were great people who have never been glorified as they deserve by their descendants. They lived in the rays of the most luminous and brightest sun that shines upon the earth. They dwelt in the great Biblical East, the cradle of religions and of civilization, the fecund nursery of races and empires, the progenitor of the most beautiful and grandest people that has ever existed upon this planet. They were as great as the elements and the land in whose bosom they were begotten.

That race was more glorious than the others, because it gave intelligence to the world: it suffered, wept, felt, perished and was born again. The more enemies it encountered, the more it struggled, transforming itself with great energy.

As soon as man became awake and civilized by the influence of light and of the elements, he attributed his protection to the light, which he regarded with singular love through a sort of

magnetic attraction or suggestion, and through a religious sentiment.

He followed the light towards the bright horizons, and along the easiest paths. In these places the orb of day shone with greater brilliancy, and consequently the human creature awoke therein with greater vigor. It would be erroneous to say that this was in obedience to preconceived ideals. It was simply a following out of the suggestion given by the light itself; the ineffable sentiment implanted in the heart of man by the senses, rather than by the intelligence. All this is fully proved by the laws of evolution.

Man dwelt, contented and expansive, where the rays of the sun shone with placid clearness, returning each morning from the other side of the world to infuse new life and vigor into the blood of mortals, and to call them to prayer and to labor.

The Aryan received that light daily with all its splendor; his blood felt its invigorating influence; his heart dilated, and there was born within him the belief that he was the beloved child of the sun, capable of spreading himself throughout the world, conquering and dominating it. These operations occasioned growth and development of the cerebral material, and constant exercise of thought was the real creation, the evolution of the human soul.

Man also encountered another unending source of needs and of activities. The species increased in numbers; families became too large for the old inheritance; tribes increased; the town and the city came into existence.

It was absolutely necessary to seek food to

sustain life. Mother Earth was stripped of her fruits. The apples and the dates and the fish of the rivers were no longer sufficient. It was absolutely necessary to seek means of subsistence; to work and cultivate the apples and the dates, and to pasture the cows and sheep in order to obtain the refreshing white milk. Thus the law of work was enacted; humanity had entered upon a new phase of the struggle for existence.

This was the foundation of a beautiful and singular legend, namely, the story of the Garden of Eden which the Scriptures tell us in a very suggestive and eloquent manner. Adam and Eve, our first parents, lived in a state of happiness, nourishing themselves with the fruit which God had provided in Paradise; they knew nothing of the physical pains of hunger, anxiety or work. The other animals rendered them obedience and adoration.

But one day Adam and Eve ate of the fruit of the forbidden tree. An angel with a fiery sword expelled them from Paradise and sorrow became their portion. They suffered the pains of hunger, and sentence of death was pronounced against them. Their feet were torn and wounded by the bramble and bitten by the serpent. They were hunted by wild beasts. Struggle and combat was the lot of man everywhere. Thenceforth the human family ate their bread by the sweat of their brow; that is to say, they had to work for it. God cursed man and the race became the heir to all kinds of sorrow and misfortune.

What does this beautiful legend signify? What is it but an allegory upon the increase of population?

While the human couple dwelt alone, the fruits of the earth, the apples and the dates, the crystalline fountains, the delicious greensward, sufficed for their wants. But then they sinned. Humanity began to multiply, and it was no longer possible to obtain sufficient food in Paradise, that is in that part of the earth selected by God for his children, that delightful spot which abounded in dates and other savory fruits and in pure crystal water. Food was scarce, and this meant necessities, bitterness and sorrow.

This legend is in eternal operation. The honeymoon of the groom and his bride is their Paradise, their Garden of Eden. Children are born and then the couple begin to suffer. It is at the same time a very sublime poem that has existed throughout the ages, eternally new and eternally true.

It was necessary to work; it was imperative to obtain food by the sweat of the brow; to plant the seed and cultivate it; to sanctify the day by prayer beseeching the daily bread; to offer orisons to the good father, the Sun, that he might smile upon the crops; to pray to the rain and to the Holy Mother Earth, ever Virgin, who conceives by a ray of light.

All the Aryan legends present this change in the condition of humanity. As poetry is inspired by nature, the Aryan bards present one legend after another with singular beauty and admirable simplicity. Strangely enough, men who were born in unfruitful places were also strong and glorious because their necessities excited great mental development, engendering sentiment and articulate speech. This latter

characteristic of humanity was, indeed, a wonderful achievement of the soul; it is, truly, the expression of the soul.

The Biblical legends, therefore, are fully explainable in a clear and natural manner. Stripped of their vesture of imagery, they contain a depth of irresistible truth which shall survive throughout the ages and be comprehended by all men. This is the secret of their immortality. Feeling the edge of want, man was urged onward by necessity. Therefore, necessity was the true source of social conquest, the germ of great and powerful civilizations.

There were also singular and inevitable differences in the activities of man consequent upon necessity. Some races sought sustenance from the ground, cultivating and planting it with seed; others subsisted on the milk of cows and sheep. The latter were pastoral people, who roamed from one part of the earth to another, seeking pasture for their cattle. Other tribes and people searched for subsistence in the rivers and seas, constructing rafts and canoes, thus laying the foundation of geography and navigation.

Other tribes hunted in the woods for the flesh of beasts and the skins of their enemies.

In this manner great diversity arose in the characters and temperaments, aptitudes, sentiments, tendencies and aspirations of the various races. The period of great clashings, the era of war was, unfortunately, bound to come.

The people who devoted themselves to agriculture were necessarily compelled to love the earth, their planted field, the producer of their grain, and the animals that assisted them in their

toil. In such a people a tendency existed toward the establishing of the home, family, country and state. They acquired force and energy in the rude struggle against inclement elements, and they were obliged through necessity to invent arms, tools and implements indispensable for the exploitation of the soil. Such people were fixed, and constituted organized societies, capable, in a word, for the establishment of political and religious communities.

On the other hand, pastoral tribes were devoted to a wandering and contemplative existence, and were devoted to barter and commerce with the agricultural branch. This difference between those races still endures and manifests itself in violent collisions, rivalries and hatred. The shepherds relied upon the meadows to feed their cattle; they were blythe and cheerful, fond of song, creators of the art of music. These people were unsuitable for the formation of a state.

The Bible contains another beautiful and suggestive allegory, that of the Wandering Jew, which portrays clearly the character of the race, describing him as a traitor to his God and to the children of work.

This manner of life could not give rise to strength or predominance in the world. The race still pays the penalty for its sin of having commerce with what the agricultural race plants and reaps, and also for its pécadillo of loving the white sheep and the musical instrument, of having lived its life in song, under the shade of the sycamore and date tree, without thought of the fatherland.

The branch of the race which devoted its en-

ergies to fishing, and the building of canoes to explore seas and rivers, acquired other tendencies. They acquired strength and experience in their struggle with the waves; they became endowed with remarkable aptitude for expansion and civilization, and we are indebted to them for great geographical discoveries.

Humanity, thus diversified and educated by nature and by the necessities of existence, in characters, temperaments and tendencies, peopled the world and multiplied languages, habits, customs, aptitudes and intelligence.

It is wonderful that in all these phenomena, the light of the sun, the brightness of the heavens and of the horizons, must have appeared as a glowing light guiding men and races.

There is in the Bible also another legend, that of the Three Wise Kings who were seeking the Son of God, guided by a star in the East, that is, the place in the horizon where the sun rises. This would seem to be an allegory of the Sun, the dawn and the morning star that attends the father of the day on his awakening.

Man, tenaciously and unceasingly, turned to this light, to this fountain of life, this adored divinity, as his hope of salvation, as the Messiah that was promised to him.



CHAPTER III.

THE SOCIAL BOND.

DANGER drove man into the arms of the wife. This was the true source of the social bond.

All exterior agents, such as the tempest, night, serpents, wild beast and other men, joined the human couple together, and wove the bonds of the family. Outside, all things combined in opposition to man: within, the spouses embraced and protected the child between them.

It was impossible for the human creature to remain in solitude. Man feared death; he acquired a consciousness of danger and was obliged to become a sociable animal. The greater the danger, the more extensive and intensive became his social affiliations.

At the hour of twilight, when the shadows lengthened upon the earth, and the stars glimmered in the heavens; when the wind began to moan upon the heath and among the lofty branches of the trees, bringing with it a host of inevitable enemies and spirits; when the flapping of the wings of terrible insects, the hiss of the serpent, the roar of the tiger and the lion in the frightful forest were heard, and the slightest sound startled persecuted man, he retired with his woman into his stronghold, giving thanks to the father, the Sun, for having permitted them to see the night. There they tremblingly embraced each other, and covered their hovel with sticks, branches and stones, and warmed each

other by the natural heat of their bodies and their breath.

In the silence of the night, stretched upon the cold couch which he had then achieved, man heard the moving of the branch and the murmur of the fountain, the crackling of dead leaves, the sad song of the night-bird, the sighs of invisible spirits or demons. He experienced a sensation of terror that caused him to spiritualize exterior things, the winds and the waters. There was a mysterious hostility between man and his invisible foes, and this hostility awakened the love of the spouses and the gratitude and tenderness of the children.

The foundation of the social world was laid in the cave, under the breath and impulse of nature in response to its creative and organizing voice, amid fervent prayers to the Sun, the father of all things, that he might bring the dawn to man. The pact was signed between God and mankind. From that time forth man could not forget God, but would always devote himself to Him as the Savior of the race. The seed of the civilized world was planted in that primitive dwelling, amid the tempest and the thunderbolt. It was the painful awakening of the human spirit.

All things impressed man with the utmost intensity. The senses, the mind, the heart, the nervous system, the circulation of the blood, were at times dilated, and at others compressed. The organs were exercised by this constant work; and the cranium grew in proportion to the cerebral vibrations. The encephalic mass underwent development, and the machine of instinct became converted into a machine of intelligence, without

apparent transition, we might say, imperceptibly, so that it was impossible to know where instinct terminated and the intellectual faculties began; where matter ended and spirit originated.

This instinctive necessity which compelled man to seek refuge for himself and his mate and their beloved offspring, soon became a habit which grew into a rational necessity. This habit was the original fountain of true love and of the institution of matrimony.

In moments of combat, the woman also defended the man. They both united their efforts to keep the door of their dwelling closed against the attack of the enemy; and in the hour of triumph they embraced each other in joy.

Upon the birth of the child, a new bond was woven. The mother took it to her breast and nourished it with her own blood, while the man worked for the three. Thus the trinity was formed: father, mother, child; three distinct persons, but in reality only one, a single entity or fusion of souls bound together by strong links and by identical interests and hopes, and by the same sorrows and misfortunes of life.

Such was the origin of matrimony, the root of the social bond which transformed the world. It had its light on the earth and in the heavens, its protectors and its tutelary gods; the hearth, the child of the sun, incarnated and gleaming upon the earth to save mankind from darkness and from the evil spirits or demons that tormented him; and the sun, itself, the eternal Father in the heavens, whose rays streaming effulgent over the mountain tops, chase away with each returning morn the fearful shadows of the night.

When we say that matrimony had its light, we mean that the light gave life and breath to mortals, and warmed the couch of the spouses. Without light, man could never have been able to see or feel; he would still be a creature of darkness, physical and mental, like nocturnal animals, those relics of chaos in which nature was originally submerged.

Matrimony, therefore, is not, properly speaking, merely a man-made rite, but rather an institution of nature. It was established by the force of the elements, during man's struggle with the fearful shadows and the silence, in the midst of the dangers surrounding the human creature in his primal age of existence.

That exquisite development of the senses resulting in noble virtue has, therefore, sprung from sorrow and suffering endured in the imperative struggle for existence. Hence we are justified in believing that suffering and toil are necessary in the social world in order to arrive at a state of virtue.

Matrimony was sanctified by the light, the divinity, because the hearth, that is to say, fire, presided over the honeymoon of the spouses. This influence has had such potency in the customs of the Aryan people that matrimony is still sanctified with candles burning before the altar.

In those primitive ages another very singular thing happened. Certain other animals, such as sheep, were, also, persecuted by wild beasts, and those other animals also associated together and joined man. A contract, or law of mutual service, was outlined. Cattle sought refuge in the dwelling of the human couple, and man

deified the sheep which supplied him with its warm wool and the cow which furnished him with its tepid milk and its butter wherewith to light the sacred fire. Those persecuted beings combined with one another; they understood one another and always held together.

In the same way man became friendly with the dog, the enemy of the lion and the jackal, and the faithful guardian of the home.

In the beginning, the sheep, the cow, the dog and man himself did not understand or know the necessity for living together. They simply felt the necessity instinctively. This instinctive feeling was the result of terror; the fruit of persecution waged against all of them by the other animals. With the growing development of his intelligence, man realized the advantages he could derive from those friendly beings that were capable of aiding him in the frightful struggle. Chief among the friends of man was the Sun-God, who frightened away the wild beasts at the dawning of the day. In the second place, there was fire, the child and image of the sun and, at the same time, a child of man who discovered and lit it upon earth by the clashing of flints; and in the third place there were the friendly animals and the spirits that favored the crops, good angels, messengers of the Father who was in the heavens, like unto the birds, with wings to soar the infinite.

Man beheld the bird that, hovering near the dead, plucked out the eyes, which man believed to be the soul of the corpse, and flew away. It bore the eyes, the soul, upward to the skies, as if to return it to the Sun-God from whom

it had proceeded like a ray of light, and man believed that the bird was another friend, an angel charged with the duty of bearing souls to the father eternal in the heavens. For that reason, man adored the bird of prey, which, also, in the field broke the head of the serpent, that subtle enemy of the farmer and his crop. This bird was another aid in the struggle against the other animals.

As an evidence, however, of the wonderful contrast, in so far as concerns the development of human intelligence and knowledge, we must observe that certain people of biblical antiquity adored the serpent on account of the fact that during the night it sought the cave of man and the warmth of his couch. On awakening, the family was filled with a sense of horror which, mingled with fear, produced a powerful religious sentiment.

It may thus be seen how the beliefs of individuals and communities took different directions, according to the impressions which the sight of objects wrought upon the embryonic human intelligence.

Furthermore, in the ancient East, the idea prevailed that the serpent was an evil spirit, and it might even be said that on account of its seeking refuge in the matrimonial couch, it was considered as an emblem of temptation and perdition. Hence we have the other legend of the seduction of Eve in the Garden of Eden.

Eastern poetry has enshrined this being and the dragon among its literary creations. One of the most charming episodes of the Aryan legends consists of the struggle between the good angel,

that is to say the bird, or guardian of the soul, and the dragon, the demon, which had come to earth to persecute mortals, and conduct their souls to Hades, the region of darkness. It is well known that those reptiles dwell underground in caves, grottos and caverns, while the bird makes its nest in the treetops, overhead in the light.

In the most remote times, man also found shelter in caves and caverns, and there he encountered legions of those creatures of darkness, those demons that tormented his life.

In the light of these simple explanations there is not a single one of those charming legends of antiquity which is not evidently founded upon fact. The literature of the infancy of the human species presents an explanation of the phenomena observed by man in the most remote ages, the period which was most noticeable for the development of sentiment. All those legends are simply the poetic expression of the impressions of man and the unspeakable sufferings of life. Tradition afterwards gave origin to the Scriptures, and this literature was handed down to future ages, finally becoming clothed with the character of revelation.

To primitive man, this painful struggle was the true incarnation of life. He did not conceive or understand any other mode of existence. There was constant conflict going on, between the light and the darkness; goodness and evil; between the angels and the demons of the earth; between friendly animals and the wild beasts. This dreadful combat was ever present before his eyes. It was his obsession, his Calvary, his

via crucis, the sole and terrible destiny of humanity. Therefore it was that he most anxiously desired a redeemer, a divine being, a Messiah to save him from the dismal kingdom of evil. In discovering fire, man found the merciful savior that cured the sick, gave sight to the blind and movement to the paralytic; and man adored fire as he did the sun.

The human imagination thereupon created legions of winged angels to defend mankind from the legions of demons, or messengers of evil, by whom mankind was perpetually besieged and who were always seeking to drag him down to darkness and utter despair.

This is the essential foundation of religion, or rather of the religious sentiment. The heart of man was penetrated by an ineffable, holy and soulfelt love of the light, and affection for those other beings that helped him in the dreadful struggle. He fell upon his knees before the Sun, every day at dawn and at sunset, and he placed his altars so that the worshipper faced the East, looking towards the rising of the sun. At the hour of evening twilight, afflicted man besought the Father to permit him to behold another day, and when the day broke he offered up fervent thanks for the return of the light.

This, in a word, was the origin of religion; and as humanity is constantly suffering and in need of consolation, it will always believe and trust in God. The religious sentiment will, therefore, be eternal.

This religious formula, of morning and evening prayer, still exists in the world. The Mass is an act of thanks to the Creator of all things;

the Angelus, an earnest prayer to God to protect us until morning, and give us our daily bread.

It thus appears that the most powerful and eternally victorious divinity was the light. Every day it drove away the shadows; and at night, fire, the son of God incarnated upon the earth, illuminated the dwelling place of man.

That luminous being, the Sun, was the generator, the almighty, the brilliant purifier, the Father who was in heaven. His infinite eye was extended over the universe; with his glance he could behold all places, discover all hidden things and keep watch upon all beings. To him nothing was secret, not even in the heart of man. Therefore man must confess his sins to purify his soul and appear in the presence of the deity after death. He gave forth heat to purify the atmosphere. He was the father of fire and also of the human eye, and this was the soul engendered in man by a ray of light. The sun was also the father of the lightning and of the rain and the winds. While rain was falling the Sun-God was in darkness and the firmament was shaken by peals of thunder. This led mankind to the adoration of these elements of nature. From all of this sprang the ideas of offering sacrifices to the purifying deity, and that the Inferno is a place of fire where the souls of the wicked are punished.

The sun was the beginning and end of all things; the holy spirit, the eternal father, immortal, luminous, omnipotent and merciful, the consolation of the afflicted and persecuted, the creator of man, the generator of the human eye.

or in other words of the human soul, the ray of light or spirit that dwells within us; and hence it was said that at death the eye returned to its father, the Sun.

And it came to pass that man having discovered fermentation of the grape, and the liquor distilled therefrom, called *soma* or alcohol, he observed that this liquor kindled within him a flame like unto the lightning or to the light of the sun. Then man drank soma to reverence the sun, in the belief that this wine was a spirit, a brother of fire and, likewise, a child of the father who was in the heavens. Man knew that alcohol and melted butter revived fire and he employed both of these substances when offering sacrifice and prayer at the altar. Humanity of to-day performs its rites before the altar, as ancestral man, the patriarch, officiated before the sacred fire, the savior. Everything that lent life to the hearth was adored and blessed. This was the foundation of matrimony and its rites, and we find herein a rational and scientific explanation of the ancient legends.

With primitive simplicity, man to a certain extent understood and accepted this eternal struggle of humanity, a struggle which was the beginning of all progress. The combat between goodness and evil is going on everywhere. It is the key of all civilizations; those that have passed away as well as of those that now exist; and it has forged the links that bind the present with the past.

In general, all those people of the ancient East believed that at the end of the centuries, the Good would vanquish the Evil and cast it for-

ever into the depths of Avernus. Some of those people, as for instance the Persians, believed that in the consummation of time, Good would convert Evil and turn it to Good, and both would then work together for the benefit of humanity.

Such profound ideas clearly reveal the aptitudes of those founders of civilization. The legends are simply the beautiful literature of those people, the work, of course, of a minority that gave direction and suggestion to the masses of the people. Similar work is going on to-day among modern nations, with this difference, that we are now able to discriminate between fact and fiction.

We are now able to appreciate the immense sentimental development of that creative minority which forged Aryan civilization, and as a result thereof we can also understand the logical developments of their languages. The stock of words increased, passing from unity to multiplicity. Such were the feelings of the founders of civilization, persecuted and lost in the desert, on the mountain, or on the seashore, on islands or seas, but in daily communion with nature and witnesses of the extraordinary manifestations of an exceedingly singular region.

But we must not forget the fact that the knowledge and work we are considering was the fruit of the minority. The crowd has always followed suggestion, impelled and taught by the directing class, which in the last resort is responsible for the destinies of the world. The conception of creation herein outlined was the child of wise thinkers, which conception they gained through contemplation of nature and of eternity.



CHAPTER IV.

THE SAVIOR.

WHEN mankind, filled with profound sadness, trembled in the midst of the darkness, a new ally, another element of life, appeared upon the earth; that is to say, Fire, the Savior.

It is difficult to say how fire was discovered. It may have resulted from a spark caused by the lightning setting fire to the top of a palm-tree; it may have been discovered through the friction of dry wood, or from the chance clash of flints. And it may not have been by chance, because it is known that the first arms and utensils were made of silex. The spark sprang from the clash of one against the other, setting fire to the dry leaves. Fire, then, the Savior of man here on earth, the child of the sun and of man, was born. It had sprung from Mother Earth, who is ever virgin, pure as the light that penetrates its womb. Fire was the child of the father who was in the heavens, the Purifier, the Merciful.

Seeing that fire was attended by flame, and that the darkness disappeared in its light; that it furnished heat to benumbed members, and illuminated the surrounding space; that it frightened away wild beasts, mosquitoes, serpents, and all spirits of evil, the pests of the caves and caverns inhabited by man; and feeling the joy caused by the presence of fire, man, with charming simplicity, believed that it was the child of

the sun, of the Eternal Father, or Holy Spirit; that it had taken form on the earth to save mankind from darkness and death, and that the holy mother, Earth, had conceived it without sin. It was an impalpable ray, an igneous breath from above, coming to free man from the persecutions of the evil enemy.

Man carried it in triumph to the cave, where it thenceforth became the consecrated *hearth*, the *sacred fire*, the *tutelary angel*, the *guardian angel*. There it crackled brightly, cheering the hearts of the spouses.

Man erected an altar to this divinity, upon which he immolated sacrifices, and drank soma, the sacred liquor, as an offering to the divinity in communion with the Holy Spirit from which fire had proceeded. Before the advent of fire, man suffered from the intense cold; he felt his limbs paralyzed, and when fire came he beheld the miracle of his cure by the heat of the hearth. His eyes opened, and his eyelids recovered their vigor under the benign influence of the savior.

It was observed that the wind fanned the flame into life and revived it; that fire moved as a living thing and that other substances also gave it life. Wine, alcohol, were congenial to fire, and it was considered proper to drink wine at the hour of sacrifice to render homage to the son of God and to the Eternal Father whose majesty was in the heavens.

This was the foundation of the great religions of the world.

Man called to his wife and child, and together they enjoyed the heat of the hearth. They lay down to sleep in tranquillity because the savior,

the guardian angel, watched over them and took charge of the dwelling, holding the demons, that is to say, reptiles and wild beasts, at bay.

It would be utterly impossible to describe the sense of gratitude that filled the heart of man when he understood these influences; the adoration with which fire inspired him; the sacrifices made before the hearth; the unction with which he fell upon his knees in prayer, glorifying and praising the infinitely merciful savior. It were absolutely vain to attempt to form in our minds a clear, precise image of those moments of religious exaltation, such as that formed by the authors of the Scriptures. That condition of martyrdom and implacable persecution by the elements was expelled from the earth thousands of years ago by fire, the child of man and, at the same time, the son of God. This spiritual exaltation and joy of ancestral man cannot be comprehended by us, his descendants. A great force, however, in the nature of a world-soul is now in existence, developed through those manifestations of nature, in conjunction with those presented by the heavens and the stars and the universe. This force is, as it were, a religion implanted in the soul of man, and it cannot be driven from the world for the reason that it partakes of the nature of the universal soul, and because it is a law of Creation necessary to mankind for the consolation of infirm souls which are always charged with hope and resurrection. This significant phenomenon, and the indelible trail it has left in human life, are the best proof of its omnipotent power and of the profound effect made upon the heart of man by the discovery of fire.

We have stated that fire was also considered as being the child of man, because it had been discovered by him. For that reason religion puts these words into the mouth of Christ: "I am the son of man."

The ancient Aryan poets who condensed the legends in the Vedic poems, those monuments of Aryan literature, must necessarily have well understood and described the phenomenon. There is nothing more beautiful or suggestive than the language of those fire-worshippers, who realized that they had been saved by that element, and who were inspired by it with the purest love for the divinity symbolized by the Eternal Father or Holy Spirit, the Mother Earth, and the Son or Savior, constituting three distinct persons, but only one in reality, one in essence, presence and omnipotence, in wisdom and omniscience, the Creator of the heavens and the earth, everywhere present, the Luminous, the Purifier. Any person can see in all this the attributes of the light, of the Holy Spirit, in fact of one God.

All the poems of antiquity, although varying in certain details, reveal to us the magnitude and sublimity of the earliest religious conceptions of the Aryan and the evolution which was gradually taking place in the world.

When fire, the son of man, begotten by a ray of the Holy Spirit, was born upon the earth, the human creature was capable of recognizing and of making comparisons. Seeing that in the eye of the living man there is a light, spirit or soul (the identity of these words is manifest) similar to the light that descends from the heavens,

and that the light of the eye disappears or sleeps when man dies or sleeps, it was believed to be an agent of the Holy Spirit which is in heaven, a breath of the Creator of all things, and that the light travelled, or was on a journey, when man was dead or sleeping. Our ancient progenitors regarded death as eternal sleep, during which the soul was reincorporated in the bosom of its father. That light, spirit or breath of the Holy Ghost, abandoned the human body, being borne away by a bird, that is by the guardian angel. When death came, the struggle between light and darkness began, that is to say, between the good angels and the bad ones, or in other words between the reptiles, dragons, demons of the caves, and the birds that took the eyes, or soul from the corpse, bearing that spirit or light over the mountain tops and winging their way to the sky. The large reptiles dragged the corpse to the depths of the caverns, into the shades, the Avernus, or in other words to Hades, where it was purged of its sins.

This was the first and true basis of civilization. Light came to earth and illuminated the spirit of man with its marvellous manifestations. The spirit of God descended upon mortals. (The latin word Deus [God] is clearly identical with the word Diaus, dia [day] i. e., light; (in spanish, Dios).

Dyaus, the being that emanates light, had formed the material world, had created and maintained the sap that circulates throughout the universe, the ethereal fluid that palpitates in all beings and endows them with form. Ether had been set in motion and it only remained to illum-

inate man's conscience by placing a spirit in his heart. Therefore, it was that the light came to the world as an irradiation of the Holy Spirit, to create the soul of man and to engender fire, the son of Dyaus, the savior and redeemer of the world.

Since that time the soul has been developing. It could discern the path, sound the depths of darkness, dissipate the shadows and illuminate our beings by the comparison of new and wonderful phenomena, and by reasoning upon the manifestations. Thus it was that the light that came into being upon the earth, opened the road and outlined the destiny of mankind.

The more study men of erudition devote to the comprehension of those remote ages, the more sublime and wonderful appear to be the conceptions of the Aryan poets and thinkers, and the more securely established is the profound influence they exercised upon civilization.

The hearth became consecrated. Marriage, that is, the social bond, was sworn to before the holy altar. Prayers and sacrifices were offered through the medium of the father, the officiating priest of the family, the patriarch of the Israelites. Altars were erected; rites formulated and consecrated, and prayer was offered to the supreme Creator of all things, through his Son, fire, the Mediator. Nothing could be more appropriate to reach the throne of the Eternal, than the Son incarnated on the earth. This is the origin, the visible source of the temple and of the church erected by man to the glory of God here on earth; and this is the sum of all that might be said, the clear, simple truth, con-

cerning the subject of religion. The rest consists of drapery, external form, the apparatus and the vesture or robes of the priests or representatives of God. Religion in its existing form is the development and evolution of the primary ideas, the adaptation of first creeds to subsequent beliefs, the mode of representing by images what took place in the world when the Savior of man became incarnate.

Another wonderful and suggestive thing also happened. Fire could be buried in its own ashes and be resurrected. Thus buried in ashes it was deposited in the ark, called the Ark of the Covenant between God and man, and it was carefully guarded by the family priest. They bore the ark from one place to another, from one hearth to another, with religious unction, and with prayers and sacrifices, so that it might not become extinguished. Fire meant all things to mankind; it was the founder of all his joy, and it gave him health and life. This custom of transporting fire wrapped in ashes is still observed in many remote towns on the American continent.

It may be said without any hesitation that this was the origin of the Christian custom of having one day in the year on which ashes are placed upon the forehead. Ashes was the clothing wherewith the son of man was clad.

Men were exceedingly careful to see that this protecting angel should not become extinguished, that it should not die out and abandon the world forever, leaving humanity again plunged in darkness, to suffer anew the horrible martyrdom of the unending, unfathomable night filled with demons and spirits of evil.

Hence the necessity for religious worship, fervent orations, when the curtain of night was spread across the face of the firmament; and also when the sun, laden with blessings, appeared upon its golden throne in the eastern skies in the morning. This was the reason of the inextinguishable love of man for the God that is in heaven, and for his Son, the Savior, as also for his revered mother, the ever virgin Earth.

Even now in modern times, a man or a family, lost in the intricacies of the forest, will light a fire to drive away the darkness, insects, wild beasts and reptiles, and they will abandon themselves to sleep while the fire, the guardian angel, watches over them.

Fire and light, therefore, anointed in truth the first stage of civilization. The immense progress of the social world dates from that period, from the hour of the discovery of fire. The virtues and commandments also came into existence because of this religious fervor. The child obeyed its parents and worked for them.

"Love thy father and thy mother; sanctify the house, cultivate the land, fill thy barn with grain, adore the Lord, thy God, and His Son." Is it not almost a certainty that these precepts were the germ of law; the first constitution of the family and of the state?

"Love and obey the Savior, the sacred Fire; offer sacrifices and libations thereto; keep the day holy; endeavor to please the Father who is in the heavens."

Is not this the pure doctrine, the true constitution of the religious world?

"Adore thy mother; the field is worth more

than the seed. One mother is worth more than a thousand fathers."

The woman adored her spouse, and the man worshipped her. Both had suffered and sorrowed together, and suffering is the fountain, the true bond of union between persecuted beings. They both pledged fidelity and love in the presence of Fire, the savior of mankind.

"I am weak and thou art my refuge," said the wife, "lend me thy arm and thy strength."

The statement of these facts, which are as simple as they are true, shows that man was not merely a ferocious animal. He had within him certain sentiments and virtues which were created and developed by nature itself, and by the physiological functions of the heart. Circulation of the blood produced movement of the spirit.

Nature educated man by teaching him hard and cruel lessons, by means of the thorns of the bush, the serpent's sting, the waylaying by wild beasts, the war waged against him by wind and water, and the crash of thunder upon the mountain tops.

The human heart was not altogether bad, although some teachers have tried to prove that it was. Even considering man as placed upon the first rung of the ladder of evolution, we must acknowledge that he was endowed with instinct and with the love of his kind. This was the starting point of conjugal love, and was the foundation and base of organic creation, and the same condition prevailed for all beings that move or palpitate. This bond, therefore, existed in a more or less embryonic state, from the very beginning of the human species.

The spirit, tendencies and duties became outlined and established as new discoveries came to light and new relations between God and man came to be appreciated, as also by reason of the increase of population. As more work was necessary in order to maintain the children, and these labored to assist their parents, affection must have increased in the individual family, and among families of the same tribe and their ramifications. The genealogical tree grew, and moral laws grew in proportion. The branches of that tree represented the physical and moral ramifications from an aged trunk, the grandfather. These branches spread themselves; they multiplied and fructified, renovating themselves and peopling the world.

Sentiments, social bonds, communications, commerce, industry, necessities, speech—all grew apace and, with these aspirations and knowledge, enriched by the mode of life, dominion over the elements, the ceremonies of divine worship and by intellectual manifestations.

Such were the foundations of those great nations of fire-worshippers whose primeval home was in Asia. The ark of the covenant, the tables of the law, and all ideas then extant in the primitive world, were brought to Europe, and later these, together with the new ideas then germinated on European soil, were all transplanted to the New World.

This world is like an anthill, the appearance of its surface is constantly undergoing change; its valleys are being furrowed and its seas crossed, while the ideals of the soul and the light of the mind and the savior of the world are borne from place to place.

The ants are still at work, laboring, endeavoring, organizing. Human society at times is in agitation. It then moves like a whirlwind, obliterating furrows, lineaments and paths, darkening the horizons. But soon, weary and in pain, it seeks tranquillity again, and marches onward upon the road of evolution.

This great multitude of beings, forming the human world, is constantly at work, impelled by the imperative necessity of self-preservation, and of evolution towards perfection.

Barbarous hordes occasionally destroy the work, wipe out the frontiers, enslave their brethren, proclaiming themselves lords and emperors, but they die and disappear, annihilated by the hand of civilization.

Humanity never forgets the legends, the rites and customs which were sacred in primitive ages, nor does it forget the merciful Savior. In Asia and in Europe, the coldest season of the year opens in December. If we reflect for a moment upon the situation of our early forefathers, we can realize with what fear they contemplated the approach of those sad, cold days, when all nature seems to die. The leaves of the trees are then swept by north-winds, and even the blood of man suffers in its circulation. The Greeks had their simple and beautiful legend to describe this change in nature. During that season, the fecund Mother Earth wept for the death of her daughter, Proserpine, who was stolen by Pluto, and all beings fervently prayed that the sorrowing mother might recover her daughter, and that joy might return to Earth.

The Aryans had fire to warm their dwellings

during winter and gathered around the hearth, where they celebrated the feast of the Son of God, who lovingly warmed the paralyzed members of the husband and wife and the tender body of the child.

Other lands call this merciful savior "Noel," and in a like manner they celebrate every year the wonderful advent to this world of that element which was to save mankind from the darkness and from the long, sad days, embittered by the north blasts. Such is Christmas, the nativity, a festival full of joy to both children and adults, humanity being still imbued with certain impressions derived from the childhood of the race.

CHAPTER V.

THE GREAT RELIGIOUS CONCEPTION: FIAT LUX.

THE history of the Oriental nations is well known, and science by deduction has been able to demonstrate with great clearness their pre-historic life.

It is known that the first religious idea, the greatest and most suggestive of all, is personified by the light and the Sun, the Father who is in the heavens.

Dyaus, Deus, say the legends, created the world, and then proclaimed: *Let there be light*. The light was created and from that supreme hour the organized world has existed.

This was the starting point of the religions that have conquered the world. In view of the knowledge of science to-day with respect to light and transmitting agents, that religious conception, that supreme *fiat lux*, stands forth as the most profound thought, the amplest conception of man concerning creation. The faculty of thought never rose to a more sublime height.

Life in its various aspects, the stars and the planets, the universe itself, are all concentrated in that sublime poem of two words.

In whatever direction we look, whether to India, Persia, Chaldea or Phoenicia, to Egypt or Israel, we always find at the bottom of all the religious beliefs of the people, the idea of the light and of the father who is in the heavens, the struggle between light and darkness, between

good and evil, the combat between life and death, and also the adoration of fire, the Savior to whom sacrifices were offered in one form or another.

All these great civilizations had between them that common bond or religious idea which was subsequently transmitted to Greece and Rome by the emigration of the Aryans; and later, through the operation of a powerful spirit of fraternity, conveyed to the remainder of the world. The religious ideals and rites of present civilized nations are directly traceable to that universal source; they all blend in that luminous trail transmitted by undulations and social movements emanating from the ancient Biblical East, and extending even to the shores of America.

This, therefore, is the trail that we must study in order to correctly understand the evolution of the social world. We know of no other civilization which attained the same degree of development as that of the Aryan race. No grander ideals than theirs have ever appeared in the world. Although differing widely from the Oriental concept, the Japanese people and the Chinese before them, were capable of great civilization. And among these, the same idea of the light existed and still exists, the same belief in the sun as that which we find at the base of musulman civilization.

In more or less advanced civilizations which might have arrested the attention and admiration of the world if they had not been prematurely destroyed, the same emblem of the light was found by the Spaniards in America, that is, in Mexico, Central America and Peru, where the worship of the sun still prevailed.

Is it not possible, nay, is it not likely, that religious belief in the light contains within itself a powerful source of suggestion, of spirituality and irradiation?

May it not be true that light is the common mother of matter and spirit, and that the spirit is, also, a manifestation of ether, like electricity and magnetism?

Nature itself proves this marvelous analogy. We have but to remember that the blood requires light to subsist physiologically, and that in order that there may be intellectual development in due harmony with the body, man needs healthy blood, that is to say, blood purified by the influence of the light and movement. Unless these conditions are present, intellectual exercise necessarily leads to intellectual annihilation or madness. We may also observe that mountain people, although they may be quite devoted to the idea of freedom and energetic in their defense of liberty, are nevertheless not the most intelligent people on the globe. It seems that they lack in a considerable degree the suggestion of light and horizon. Human intelligence awoke to greater activity and brilliance in places favored by majestic light, as already stated. In these regions man's observation of beings and things was facilitated. By the influence of light cerebral matter was excited to greater ebullition and movement, thus increasing in a wonderful manner the impressions of the heart and engendering thought.

When we put a seed into the ground and the tree springs into being, we say that Mother Earth gives to it of her sap and carefully feeds

her offspring. In like manner we might say that the intelligence of man is more developed in those places where the sun shines with greatest brilliancy. The light nourishes its child, intelligence. This idea differs in no respect from that found in the Scriptures. It is recorded in Genesis that God first made man and afterwards, by a breath, endowed him with a soul.

We know that since the beginning of the world mothers have nourished with their own blood, the offspring they brought into the world; and this is what the light does with respect to the human spirit.

Let us continue to set forth certain facts already admitted by science and anthropology. We have already demonstrated how the adoration of the light and of its child, Fire, influenced the first development of the social world, and laid the foundation for religion and civilization.

The worship of fire was the origin of altars and of temples, and as happens with every institution that degenerates in the hands of man, as soon as the necessity, or the sentiment which called it forth, disappeared, these religious ideas were forgotten in proportion as man felt that he had conquered the elements of nature. But knowledge of these things and of their latent connection remained. Once the intelligence of man was awakened, he naturally desired to understand everything. Thus began the development of the sciences. Man began to speculate upon the cause of the visions that penetrated his mind and heart through the retina. He could see in the pupil of the eye, a light which seemed to come from the interior of the body, and he

believed that the eye, exhibiting that internal light or spirit, had proceeded from the sun; that it was a sunbeam or breath of the divinity. Therefore the poet said that the soul of man was created by a breath of the Holy Spirit.

It was observed that the eye closed during sleep and assumed a pallid hue, and man supposed that the soul, the internal light, had left the earth and was travelling elsewhere. It was a spirit; it was human intelligence come to life.

Man next sought an explanation of death, that long sleep from which it seemed that the creature was unable to wake. Through innumerable years man had seen his fellowman fall dead in the field, like other animals. We all know that cattle whine dolorously upon coming across the remains of their kind. Do these animals understand or remember? Perhaps so, but it is indisputable that they feel. The sight of the body conveys to their brains and hearts a wave or current of feeling which oppresses them and produces sadness. The circulation suffers. This phenomenon appears to be caused by a wave of sympathy which first touches the senses and passes to the brain through the nervous system, which is a sort of telegraphic network charged with the transmission of the relations between objects and sight. It is for this reason that pain and sorrow are so injurious to the health of man; and for the same reason excessive sentimental development is injurious to certain races of the human family.

Ancestral man felt death, but he did not understand it. With the advance of intelligence there came a day when he could compare it with

sleep, that is to say, compare it with a phenomenon which was more simple to his mind. He believed both of those manifestations, death and sleep, to be identical. Furthermore, as he observed that after sleep man awoke, and the light of the soul returned to the eye, he made the logical deduction that death was only a long voyage of the soul, and that it was necessary to take care of the body while the soul was traveling. For this reason, he prepared food and placed it near the body. Some people kept the body in their dwellings, without being troubled by the putrefaction of the corpse. Others, more civilized, built pyramids, like the gigantic structures of the Egyptians, who aimed to place the body as near as possible to the sun.

The human soul was born. Many first felt its existence in his inner consciousness. From sensation it became idea, but without perceptible transition, through evolution. At first, the heart and brain of man were affected by beams of light that came from exterior objects. The ether transmitted the luminous vibrations reflected from other bodies; the human eye received these rays and sent them through the nerves to the heart. We do not say to the brain, because this, in its turn, is the nervous center, constituting a sort of voltaic battery that reproduces impressions, or a camera which takes the image of objects and presents them to our consciousness.

As a matter of fact the soul was not formed all at once. It developed gradually. Each object seen by man produced a conscious perception which could be remembered, thus giving

birth to ideas more or less simple and embryonic. Impalpable essences were acting in and upon the spirit, forming the soul slowly, humanly. At first the power of the soul was quite restricted and insignificant. Through long ages it manifested itself in man as a purely animal instinct.

The various races differed in their explanation of the phenomena of life. The Oriental believed that the eye itself was the soul, that he beheld the soul in the light which seemed to issue from the interior of our beings, that light which was so similar to the rays of the sun. Hence the legends which tell us that the eye returns to the sun and the body to the earth. They did not know that the eye is simply a lens, and that the light is the very light of the sun itself transmitted through the ether and converted into intercerebral vibration.

The beautiful biblical legend which tells us that God made the human body of earth, and then by a divine breath endowed it with a soul, is a simple explanation of the phenomenon, as primitive man understood it when he beheld his fellow-man die. The body would putrefy, that is, it would be reconverted into earth, and the eye would lose its lustre. "Dust thou art and unto dust thou shalt return." This was and still is the chant of the priest officiating at funeral rites. But the light of the eye, the soul, the divine breath, ascended to the firmament; it flew to the throne of its father. The divine ray mounted to the Empyrean whence it had proceeded.

At the present day, scientific knowledge is approximating toward these conceptions. Life and spirit are creations of light. The body

sprang from the earth, being a product of organic creation which began in chaos, in the sublime hour of the birth of light, the hour of the *fiat lux*. The light reached the earth and the earliest terrestrial beings took form through different combinations and juxtapositions. The soul, the intelligence, the spirit, were created slowly, by the growing force of luminous vibrations collected by the eye. The nerves and the heart had exercise, and underwent development; the cerebral mass throbbed, and through the mechanical exercise the cranium began to expand; the circumlocutions formed themselves and that interior something, that spirit whose visible and eloquent manifestations man could almost feel within him, was gradually developed.

Why was it that the genius of ancestral man could so well comprehend and explain the origin of the human soul? Because he observed and investigated the phenomenon, without wandering into metaphysical creations. His simple soul, newly born, was more capable of judging by what reached his consciousness through his senses, and this is the best form of knowledge. It is, indeed, the only means of intellectual progress, and is, in the last resort, the path by which science has reached the wonderful state of development it presents in this age.

The modern world is unable to explain impressions which it has not felt.

Since that primitive light has, however, returned to human intelligence, and the road of direct experimentation has been found again, science recovers its power and penetrates more clearly into the mysteries of creation.

What a wonderful effect upon the development of the human spirit would the discovery have, that light is the source of material life, and of spiritual life as well. How the nations would realize their common fraternity, and learn to understand one another.

The health and prosperity of the races will depend upon that discovery, and all sciences, especially medicine, will enter upon new and broader paths.

Another religious world, born of the first, a child of the divine *fiat lux*, is already germinating in the conscience of humanity.



CHAPTER VI.

SOCIAL TENDENCIES.

THE soul of man grew into being through evolution. By this is meant, that there was creation and multiplication of the manifestations of his heart, brain and nerves, which are the agents for the transmission of movement from the ether which circulates in the universe.

Matter yielded a spiritual product through the operation of vision, and the impressions of the other senses. Man saw and heard, felt and thought. The material waves became converted into spiritual waves. The spirit of God, the spirit of the Universe through the influence of light, penetrated the organism of man.

The continual sight of objects, the entering of light through the eye of man and the image created in his brain, gave rise to thought, memory and reflection, that is, to the complete and manifold life of the human soul.

The individual had a soul which was infused by the beams of the sun. In order to gain this soul, man had to experience thousands of sensations and external visions; he had to undergo an infinity of wants and sufferings. There came a day when consciousness responded to the repeated calls of things seen, heard and felt. Man formed his first home; he experienced love and clung to the spouse and children. He felt first and became intelligent afterwards.

It is not amiss to repeat this truth, that the

light came first, and then organic creation. The faculty of sensation and the impression of things, preceded intelligence. It was matter that first throbbed and moved, and upon beholding and feeling this commotion, the cerebrum of man became more and more enlightened.

And this illumination went on increasing throughout the course of the centuries. The first enlightened individual or couple constituted a center of light. This progress of the human spirit and the communication of one spirit with another by means of waves and irradiations traveling from one to the other, shows the identity of spiritual with astral light. The spiritual focus shining in the mind is quite similar to a lighted candle. Both are illuminated circuits.

Each new couple descended from the first, received the spirit, the idea, and these, in their turn, gave further light, like a second candle lighted in a chamber.

In this manner, according as the family, tribe, and later, organized society were constituted, there were communications, undulations, new cerebral candles lighted, suggestions wafted from one soul to another. The first social wave, sympathetic, suggestive and unifying, sprang from the earliest trinity, the father, mother and child. The father assisted and guided the wife and child in the darkness of the primitive age, invoking the aid of fire and light to illuminate the path; and afterwards, all helped the other children. One family assisted other families, one tribe, other tribes. The light, the fire, went before them on the altar, brightening the path and diminishing the dangers. The Sun and its child,

Fire, were the gods, the protectors of man. Ideas, examples and experiments, necessities and cerebral activity, were multiplied and enlarged, according as the social nucleus increased in size. A spiritual atmosphere, charged with ideas and reasonings, was created which circulated among the members of society. All of the lighted cerebral candles were shining with permanent suggestion. It was a polarization, a certain impalpable fume, or essence, which through successive intercommunications passed from eye to eye, from mind to mind and from heart to heart. A tendency was created; a point of view similar for all came into existence.

Necessities, work, relations and language increased with time. The functions of the different nuclei, and even the labor of individuals became differentiated. As the family increased the work was divided among its members, and the social organism was formed. Some prepared the food and others took care of the dwelling, the cradle of the children. Some planned the work; others executed it.

Some men devoted themselves to the worship of the Gods; others preferred work. Some were the head; others the arms. In this manner the eternal struggle of the social world and class differences were established. Ambitions, aspirations, tendencies and contrasts came into being. It can very properly be said that in this way the collective soul was created, or in other words that the social tendency was formed through the sum of the tendencies, ideas and thoughts, wills and consciences.

It will, therefore, be seen that communities in

their infancy pass, like a child, through certain unconscious and incoherent stages, under the complete dominion of passion. Emerging from this state, the true development of society began, and the collective soul began to operate.

There was then a transmission from the individual soul to the soul of the many, as the light of one sun passes to and blends with the remaining lights of the universe. The spiritual light propagated itself in direct proportion to the mass and in inverse ratio to the square of the distance, like the light that reaches us from the sun or the stars. If the ideas and tendencies of two souls agree in intensity and direction, they will blend like the light of the planets. In obedience to this law they will blend with all other souls that are actuated by like forces. The wonderful coincidence of this law of optics with the law governing the propagation of ideas and suggestion, which we might call collective or social, clearly indicates the intimate relation that exists between light and spirit.

Such is the collective soul that exists in all associations, even in those of the inferior animals. A general will becomes evident, a necessity of existence, of intimate union for defence or offence. This is the origin of the city; of the congregation of individuals within a walled retreat, or surrounded by trenches for defence against attack by foreign tribes or peoples.

There was true social evolution, not perhaps deliberately thought out, but rather felt instinctively, and rendered inevitable by the struggle for existence. It is very difficult to determine when reflection first came to man or to people. There

are no transitions, as there are no transitions between material and spiritual manifestations, between the heart in agitation through sensation or sentiment and the brain which conceives the idea. They combine and blend simultaneously. They are one and the same thing, products of matter and of light, communicating and commingling through ethereal undulations whose gamut varies in intensity and form like the notes of musical scales.

In these social beginnings, the instinct of self-preservation was the prime factor or force compelling to union. We have seen that the inclemencies of nature and dangers drew men together, as cattle huddle close to each other on hearing the roar of the tiger. In nature, animals that fear others are gregarious, while those that are incapable of terror are solitary and ferocious. This is true in the case of birds, as well as among mammals.

The first phase of nature was force. The first laws were dictated by suggestion. There were no rules formally promulgated. Man was guided by urgent indications, which he was compelled to obey.

The first law-giver was the grandfather; the trunk of the family-tree, the patriarch. His orders were imperative and dictatorial. This is the reason that the monarchical form of government appeared first in the world. It is the appropriate form for nations during such time as they are controlled by passion.

The patriarch required something to be done, and he issued his orders indicating a certain course to be pursued tending to preserve individ-

ual life, and collective life at the same time, as the preservation of the unit is essential to the conservation of the product.

Such was the source of that form of government which is now the bugbear of anarchists, who forget that thus the world began, and that all things and elements in nature are governed by inevitable laws.

An essential condition of collective existence is that society be controlled by some government, since fear was the prime law and true bond of union. History shows that religious fear and direction by those most advanced in age, knowledge and the art of governing, brought happiness to mankind. Laws are necessary for the preservation of virtue and order, as they are requisite for the maintenance of equilibrium. Even the planets are subject to the law of universal gravitation.

Certain nuclei were first constituted and these grouped themselves around a central figure. This figure was the chief member of the community, by reason of being either the oldest or the strongest. This chief was also the natural authority as to habit and custom. Children necessarily acquired the customs of the parents, and the habit of obedience. In order to learn to command when they should become head of the family, they began by learning to obey. Hence this is an invariable rule in the education of man. The child furthermore invoked the protection of God, as well as of the chief of the family. It was customary for them to follow their chief and to group themselves around him for mutual defence or attack. This was also a contract im-

posed by necessity. All things come into being through the influence of force, or through the action of many forces engendered by the necessity of existence and of organization.

It is not necessary to amplify these ideas in relation to the process of social evolution. It can also be said that there was no definite transition from the tribe to the state. Evolution proceeds gradually, but it is impossible to rest the foot upon any rung of the ladder, because we cannot determine where they begin or end.

In addition to the sentiments of solidarity above referred to, there was also the sentiment of fraternity, the love existing between those who knew one another and who lived together, who slept in the same house, warmed themselves at the same fire and labored at the same tasks. These sentiments were the result of the habit of association and sprang from a sense of gratitude for mutual assistance.

The precept that we should love our parents and our brethren was likewise felt before it was understood and reduced to law. The fundamental law, however, was to love and obey God. It is, therefore, impossible that the love of God should disappear from the world, as it is, also, one of the bonds that hold society together.

In the course of time precepts were generalized and the doctrine that we should love our neighbor as ourselves was evolved. It is wonderful with what simplicity the laws of mankind upon which the social structure rests, grew into being. The laws were all linked together, developing from one another, like the manifestations of the spirit, creating an intellectual in-

heritance and moulding social tendencies. Society acquired memory, as the individual had acquired it; that is, by force of impressions and cerebral exercise. This phenomenon may be quite well understood by observing what happens in the case of a steam engine which has been set in operation. Although the engine is not an organism endowed with life, movement will continue for some time although the engineer may have closed the steam valves. If its motion had produced sufficient heat, that heat would also last for a certain period. The manifestation is still exhibited by a lifeless machine. With much more reason, the faculty of manifestation must remain in the human brain whose cells are endowed with life and movement and are always at work reproducing thoughts and images. For this reason those minds which do not exercise their faculty of thought are not far removed from animalism.

Logical and wise principles for the government of nations may be deduced from those truths that have relation to the conversion of custom into law. Laws springing from custom and social necessity, and not from the caprice or theories of legislators, are alone beneficent to mankind.

The same cause operated to render more solid and powerful the bond between the members of the same family, while it caused the bond between family and family to become less strong. This fact is explainable by the law of propagation in the science of optics, that is to say in inverse proportion to the square of the distance. The bond between couples foreign to

each other was still weaker, or perhaps non-existent, or on the contrary became converted into a sentiment of hostility. Their tendencies were discordant. Thus it was that communities acquainted with each other and having easy means of intercommunication, developed quite readily into national entities. This is the great rule for the unity and friendship of the nations: acquaintance and facility of communication. The wise and prudent government builds roads; the ignorant erects walls and bars communication.

The fraternal bond cannot exist between nations separated by rivers, seas and mountains, unless artificial means of communication be resorted to.

Since those remote ages, such distant peoples have regarded themselves as rivals and strangers, their mutual antipathy reaching even to the point of constant war, with the object of exterminating each other.

Love and brotherhood are not the result solely of sexual necessity and consanguinity, but rather of community of ideas, sentiments, beliefs and language.

Consequently nature itself separated men and nations, limiting their tendencies and appointing their destiny by placing between them vast seas and mountains.

All, then, had its prototype in the primitive nucleus: the family, society, the state, virtues, solidarity, hatreds and rivalries, languages and religions.

Man, for example, felt the cold, and he made clothing for himself; at first of leaves, then of skins, and later of textures. He covered his

body in order to warm himself, to avoid being wounded by the thorns of the brambles, and to protect himself from the sting of insects. Without thinking of it, or aiming at it, an adorable virtue resulted from the use of clothing; namely, modesty. Man became so accustomed to clothing, that he felt pain and a sense of shame when by chance his raiment fell from his body. In this simple way, chastity, that virtue which so delights the truly cultivated man, was engendered.

Even at the present day this truth can be absolutely proved. With careful attention the mother looks after her daughter from the time of her birth. She accustoms her to keep her little body continually covered, and thus she forms a truly modest child. Unless corrupted by evil influences, that child will retain her modesty as an innate sentiment of her soul; that is to say, as second nature.

On the contrary, if the mother accustom the child to nudity, the child will be shameless and irresponsible. Thus a woman acquires a vice or a virtue unconsciously, according to the care which the mother bestows upon her in this direction.

In this manner all human virtue came into being by the operation of an absolute law.

Human virtues exist because they are necessary to social existence; and, therefore, it would be a great crime to destroy them or make any assault upon them. Hence, the necessity for severe laws to maintain good morals; hence, the Censors of Rome in its better days.

Honor, modesty, fraternity, were all created by nature itself, and not as the result of laws or

regulations imposed by man. The Scriptures condensed the facts; history has simply narrated them.

Man reduced to laws what nature had engendered by evolution in physics and morality. Hence, when man abandons nature and seeks to legislate and govern by the caprices of his will, or his intelligence, society is subjected to a species of hydraulic compression. There are reactions, opposition, and resistance in all directions, and these forces explode in the form of revolutions or civil wars.

Such is the origin of society and its laws. From this it appears that it were unnatural or unhuman to renounce or waive government. Anarchists, therefore, are guilty of the crime of lese-humanity.

There is in existence a collective soul, tendency or force resulting from the combination of all forces. This collective tendency or force is, in all respects, subject to the laws of mechanical forces, and it impels the social organism towards perfection and creation. While these forces are in process of formation, society makes but little, if any, progress. The collective soul is strong when its component forces, or different streams so to speak, are concordant and harmonious. On the other hand, the collective soul is a weakling, a nullity, or even anarchial, if each nucleus composing it be actuated by antagonistic impulses.

This is a law of mechanics. Let us observe, in passing, that the laws of physical forces are in wonderful agreement with the laws that govern spiritual forces. The human spirit not only acts like the light, but also acts in pursuance of the

laws of Mechanics. When two forces are applied to a given point, both acting in the same way, the resultant is equal to the sum of the forces; but, if they act in contrary directions, the resultant will equal the difference between the forces. If they are of equal strength and contrary in direction, the resultant will be *nil*.

This principle also governs social forces or currents.

Is the soul of society susceptible of perfection? Can a national government give an impulse to its progress? We say, undoubtedly. The procedure is clear and evident. The concordant forces, the works tending to a single object, such as roads that lead to the intimate intercourse of the people, must be multiplied. It is necessary to level the intervening mountain, to destroy passions, and to light a single spirit that shall animate each conscience.

This is another point of contact between astral and spiritual light. Similar lights increase the illumination of the universe. Concordant, spiritual lights increase the civilizing force of the nations and more fully illuminate the social world.

CHAPTER VII.

INVENTION OF WEAPONS.

LET us now consider primitive humanity under the aspect of the weapons and tools which it invented in its struggle for existence.

Man obtained his first weapon by the merest effort. There were branches and stones in the path, and he had simply to stoop for them. With these in his hands he felt a trifle stronger than he did without them, but he did not feel sufficiently armed to do battle with wild beasts. Primitive man was endowed with great strength and powerful muscles, but a stone could do nothing against a tiger or a lion. He next sharpened the stone and pointed the branch. He used pointed stakes for the purpose of intrenching himself. From flint he made knives, axes, and arrows; with these he was able to wound his adversary.

Man's knowledge of his power grew little by little. We cannot say that the child or the man deliberately thinks of using the stones that are at hand, and of defending himself. These actions are rather instinctive and nervous. The human organism resists attack through an innate love of life and through bodily excitement that arises to repel danger and avoid death.

Bronze and iron were discovered, later, and a method was found to melt them. Anthropology has found evidence of this painful human labor. With a blow man could then sever the head of a wild beast or of another man. With his weap-

ons in hand, man became victorious. The conviction and consciousness of his power took root in his spirit, producing the sins of pride and arrogance. But there was no idea which did not originate as an effect, something that was felt before it was understood, for if man reflected without having been brought to do so through the stimulus of necessity and the suggestion of phenomena, humanity would make no mistakes, nor do anything unwise.

To a certain extent, man had conquered nature. He now had weapons, tools, clothing, a dwelling, and he might cast fear to the winds. A change of front and of sensations, and consequently of thought, was the inevitable result. Cain appeared upon the earth. From being the hunted and vanquished, man became the persecutor and the victor. He saw blood flow; he delighted in revenge, the first and embryonic form of justice. Cain shed the blood of his fellow-man, of his own brother.

This was the real ominous fact, as recorded in the Scripture legend. Cain killed his brother Abel, of whose virtue he was envious. It may have been through envy of his power, through some dispute about land or cattle, through jealousy about a woman, or through any of the passions which are natural to man. The legend is symbolical and describes with singular color and effect one of the dominant passions of human nature.

Upon the invention of weapons, and the disappearance of fear from the heart of man, the soul and the social tendencies underwent complete modification. Newly formed states com-

posed of different races, went forth to struggle one against the other, for the sovereignty of the earth and dominion over its fruits. Although through the union of forces, the new factor of civilization contributed to the formation of powerful states, it nevertheless developed, correlatively, the sanguinary instincts of man. These instincts, which in the beginning were a necessity of existence, would yet overwhelm man with horrible passions, and this to such an extreme that he would lose the path of Aryan civilization, which prohibited the shedding of human blood. Virtues, traditions, legends and gods were all forgotten. Man came to resemble the tiger or the lion, animals that are incapable of social organization, because of their fearless, sanguinary nature.

The stage of history is next occupied, not by the laws of Zoroaster, who commanded religious cultivation of the earth; but by mighty conquerors, Kings like those of Assyria, who condemned their prisoners to be flayed alive and impaled upon sharp stakes, and warriors like Cyrus, Darius and Alexander. Nevertheless, in the midst of war civilization pursued its onward march. There was more intercommunication of the people; ideas, souls, consciences, clashed or blended. Races, religions and gods were intermingled; the social atmosphere was formed and grew apace, while the exercise of minds and hearts developed and widened the destiny of mankind. The social medium was created with undulations, similar to those of light; with impacts and reactions; reflections and refractions, commerce, ideas, desires, and innumerable other factors which were

to inscribe many items to the credit of human civilization, but which were also destined to make many entries upon the debit side of the account. The result of such forces and currents would indicate new paths for the nations, as light shows the roads within the horizon.

We must not, therefore, curse Cain. The social world has garnered fecund fruit from wars and conquest. Those lakes of blood were means of communication, and were at the same time lessons learned in the school of nature. Reflection would come at last. The very horror of the bloodshed would engender fraternity and spread it throughout the world, together with ideals of equality and justice. Thus it is that evil brings blessings, by awakening the mind of man.

The ancient world was aroused by iron and blood, and the mind and conscience of humanity recognized the necessity for a new social current. The result was the beautiful Christian civilization, preached by Jesus Christ and his Apostles. Com-motions have always something grand about them, because they agitate the social medium and produce spiritual light. Ideas propagate themselves by suggestion, and civilization advances on its way. Humanity becomes agitated, and spiritual waves travel from nucleus to nucleus; they flow from mind to mind and from people to people. Some are waves of love and sympathy; others are of hatred. Some are congenial and unite with each other; some are mutually repellent and remain isolated; the resultant they produce is in exact accordance with the laws of physics. This law has governed the collections, or rather the forces of action and reaction

in the social world. It has operated in ancient as well as in modern times, and upon large as well as upon small nations. When historians say that the Roman Empire was disrupted by political disorganization and moral corruption, they are referring to but one factor. The Empire had grown extraordinarily. The forces of the West began to weigh heavily in the balance. Upon one side forces were applied in the direction of Rome, and on the other side in the direction of Constantinople. As there was not sufficient force in the direction of Rome to maintain power, the great tree was torn apart. Emperors of the West appeared upon the scene, and Constantinople glittered in the light. The resultant of the forces established equilibrium.

The smallest consideration and study of history will show that it presents eloquent proof of this truth. The sovereignty of Rome was maintained as long as there were no contrary forces at work capable of drawing the people towards other regions. From the time of Caesar and Augustus the Roman government was beset by the necessity for subdividing the Empire into Consulates, and it was in that epoch that the natural frontiers of Europe began to assume outline. Inexorable laws of equilibrium governing social mechanics, indicated the limits and the extent of each country. Hence, imperialism, or universal dominion, is a chimera, as the union of all worlds and of the millions of suns and planets of infinite space in one solar system, would have been an absurdity of creation. It will, therefore, be seen that empires in their fatuous grandeur are themselves building their own tombs.

This law also prevails in the case of civil wars. In ancient times, the government moved from one city to another in obedience to these immutable laws. The great centres of the world, such as London, Paris and other capitals, placed by nature itself in situations favorable to growth, have alone triumphed. A strong central power is therefore required in order to maintain the national organism, in proportion to the extent of the national domain. The decadence of Spain was referable to this cause alone. Men, and communities also, became haughty through the possession of power; and the haughty were never capable, and never will be capable of reasoning.

This faculty is left to the humble strugglers, whose feet and hands become weary and covered with blood, and who learn the great power of intelligence and of truth by bitter experience.

This phenomenon is exactly like the struggle undertaken by the light. It penetrated and illuminated the corners, and dominated the folds of darkness. The shades were overcome, and in this manner worlds and organized beings were brought into existence. The light engendered and created, vibrating eternally on things. When space was illuminated, the worlds fell into line, the resultant of all forces that were applied to them having been established. The Infinite labored to discover the laws of gravitation, to ordain its statutes, that is to say, to regulate the government of the Universe. The stars and planets established their different orbits, centers and systems as the result of mutual collisions and of continuous apocalyptic agitation in the realms of space. Disorder was the parent of

order. All things begin at nought, because creation commenced at zero.

That change of front on the part of humanity, those shadows of war really gave a direction to civilization and laid the foundation for Christianity, the grandeur of which is not yet thoroughly comprehended. The various states were arranging themselves, learning to respect one another, and creating law and justice. What a painful operation! The task is not yet finished. Perfect harmony has not yet been reached, but civilization is on the path that leads to it.

No other means of experience was possible in those ages. Nature and man were both simply gross material. Iron implements were requisite to forge and drill the human soul. Conscience was not yet pure. The supreme truth of things was as yet unknown. Everything had to be moulded into shape. Without such struggles and the desire for expansion, the Aryan people, or rather primitive man, would have remained for thousands of years in the cave and in the forest. Nascent civilization would have perished in its cradle.

Here we may appreciate another marvel of the influence of light. The force of expansion furnished the races with the necessary quantity of blood having the necessary proportion of red corpuscles, the result of the influence of light upon the tissues.

It was through these wars and emigrations that we have had an Egypt, so high in the scale of civilization; an India, to which the development of the human spirit owes so much. The ideas of those nations were propagated and diffused throughout Greece, Rome and Gaul.

Through that racial genius awakened so early upon the steppes of Asia, the discovery of a new world was achieved on the threshold of the modern age. Weapons, tools, ships, the ark that contained the sacred fire, all contributed to commerce and expansion. The brightness and beauty of the horizon, together with facilities for communication, also contributed to the same end. Nothing is worthless in this world. The marsh serves to exalt the purity of the ermine; the serpent compels us to find an antidote in order to preserve life; the cold drove mankind to the invention of clothing; force oppresses us and teaches us to consider means to attain liberty. An excess of evil always brings its own remedy. Without that varied combination of beings and things, difficulties and dangers, man would still be living in ignorance. Without such incentives, we should have had no priests, no prophets, no artists. There would have been nought to arouse and illuminate the intelligence of a Zoroaster, Buddha, Jesus Christ, or of the Vedic poets. We should never have heard of John the Baptist or of the Apostle Paul.

On the other hand, the invention of weapons and the establishment of castes, served to integrate the social organism by forming people and pariahs who struggled to rise, holding on the cliffs and crags so as not to drop down to death. And this force, this desire to ascend is the immanent source of progress.

The priest or patriarch, who had also been the civil chief, became a warrior chieftain. Being unable to discharge the functions of both offices, he appointed delegates, and the first boundary

line was marked out between the civil and religious powers. These powers existed in combination for a long time, but the day of separation at length arrived.

By degrees the social functions outlined themselves. Each chief began to rule within his own district, so as to maintain the equilibrium of the state. There were delegates, hierarchies, and employees having charge of other men; and there was a king who was the supreme chief of all the branches into which the government was subdivided.

These hierarchies were also factors in the movement of the social organism. They also appear in the general balance, or profit and loss account, which has taught the world so much. The aspirations of each class, the desire to rise, to excel and reach to the highest positions, were all means of progress and agents of illumination and awakening.

The social subdivisions, the castes of the ancient world were, therefore, not illogical. There was a need for the pariahs, and even for the belief that they had issued from the foot of Brahma. Every pressure produces reaction. The laws of the lever also apply to the social world. The mechanics applicable to the motion of physical bodies is identical with that which controls human destiny. The electricity that flashes in the clouds manifests itself through like phenomena in the human spirit, and the laws of magnetism are also applicable to man. All physical laws are contained in the code of moral laws. Both the physical and the moral world are the product of motion and of the eternal

transmutation of things and of the ether circulating throughout the vitals of creation.

We should not regard with hatred one who oppresses us, or kill him with rage and passion. In a certain sense he renders us a service by awakening us and compelling us to reflection. The more the overseer may desire us to keep our minds plunged in darkness, the more prone we are to lift them, in rebellion, towards the light. Let us, with our own proper thought, illuminate the darkness which he engenders, and let us bear in mind that his procedure is the inevitable result of the social environment in which he dwells.

When civil functions assumed outline, conflict supervened between the warrior class and the sacerdotal. The former triumphed and, consequently, force was believed to be the only means for the foundation of empires. They were maintained with iron; and iron was the material of which were forged the chain-links of the nations. The history of ancient nations may be condensed into those words.

At the same time the victorious world considered it proper to despoil the vanquished foe of his body, his property and his labor, of which the victor considered himself the owner. Whole columns of men were harnessed to the triumphal car. Thus slavery was introduced, and this, although it was a great evil, was yet another factor in the awakening of the world. To a certain extent man was emancipated from so-called natural sufferings, but new ones took their place, as if nature believed that the human soul was not, as yet, well finished, and that it had to be

perfected through martyrdom itself. Man arose in greater power against his fellowman. The legend of Cain became a living entity, immortalized by the descendants of the fratricide.

Nevertheless, from that disorder and darkness, other light issued. Goodness was disinterred from its sepulchres. The Christian sentiments of equality and mercy came again into the world. The outline of the future became more clearly visible.

The constant bloodshed has been also an inexhaustible fountain of perfection. The conquered nations humiliated themselves, accepting the yoke and the whip. But remembering their state of freedom, their beloved land, their sacred idols, their children, and the fire lighted upon the distant hearth in a world of promise, in the land of Canaan, they sought for means to remove the yoke and break their chains. Children of freedmen, they became citizens of Rome. The Gauls were in a ferment; they prepared themselves and hastened to the combat for the conquest of liberty. It was necessary to file those cruel chains which tortured the feet of man; that whip which lashed him in the face had to be destroyed; the gladiators must be dragged even from the mouths of ferocious animals. A reaction, engendered of pressing necessity, declared war against the conditions that were deforming and obliterating humanity; and the human spirit arose with greater fulgency from its state of degradation.

Therefore it was that the sacred teachings of John the Baptist and of Jesus, easily penetrated the conscience of mankind. History records the

centuries that were required to consummate this awakening. It also recognizes that the awakening was not complete; but although something is still lacking to illuminate the world, the candles have remained lighted since the days of the Apostles.

Let us now compare the developments of human sentiments during that period of pain and dangers already analyzed, with the development of sentiments in the ages of warfare, in the man accustomed to predominance, proud of his strength like the tiger or the lion.

The sentiments of the discoverer of fire were pure and noble. Dangers made man a virtuous and compassionate being. Pain formed good souls. Those maxims were revived in the time of Jesus Christ, and they will endure forever because they are of eternal beauty and are comforting to those who suffer, that is to say, to the majority of mankind; but we must observe that they were resuscitated by pain and slavery, in pursuance of the law of action and reaction. The period of the Middle Ages was that of another awakening of the human spirit and of the resurrection of Aryan virtues.

On the other hand, war engendered pride, avarice, cruelty and slavery. It gave birth to hate and revenge, and stimulated those passions to a degree that would shame the legend of Cain. It tainted the upper classes with corruption, and the lower classes were infected through example and suggestion.

Civilization is but a current, similar to ocean currents or regular winds. It moves like the waves of the sea; like light, heat or electricity;

and it is charged with attractions and repulsions like magnetic waves. Like a current of light, it has been frequently interrupted. Prejudice and ignorance have been the barriers that impeded the growth of the spirit. It is understood that it has trajectories, transition, rhythm, reflection and refraction, and something still more durable, namely, memory and intelligence; that it rises and falls alternately throughout the course of the ages, constantly inventing and learning through suggestion and spiritual illumination. We thus may see how the language of physical life is applicable to the human spirit; and how the laws of physics seem to govern the moral world.

Spiritual undulations move with the same rhythm as those of ether and light. Ideas attract and repel one another, and combine and blend, producing light, heat, electricity and magnetism. Ideas have their insulators and conductors, opaque or transparent bodies, media appropriate either for their vibration or refraction. In a word, the laws of mechanics and of universal gravitation are applicable to ideas.

These alternatives and currents are quite clearly marked in the development of all nations, ancient and modern. Let us recall only the history of Egypt, Chaldea, Persia or Greece. Those nations had periods of virtue and knowledge, which might be termed periods of light. They also had epochs of corruption, which we might call periods of darkness.

The nations of the modern world have been no exceptions to the operation of inexorable laws.



CHAPTER VIII.

THE PASSAGE OF CIVILIZATION TO EUROPE.

HISTORY tells us how civilization passed from Asia to Europe, and a study of the circumstances attending its path will reveal singularities worthy of scientific attention and which are of great utility in leading to a knowledge of truth concerning the development of the human spirit.

The civilization of the modern world partakes of the civilizations of the ancient world. It seems that nothing has been lost; that the luminous wave has vibrated from the beginning of the ages, as the light of the sun has flowed continuously since that orb was first disengaged from chaos. It appears that a system of concentric waves, impelled by the thought of ancestral communities, has been charged with the diffusion of ideas, knowledge and products; and it is furthermore observable that those waves required easy and ample means of communication illuminated by the sun.

From Pamir to India, to Persia or Egypt and Asia Minor, no very serious obstacles existed to interfere with expansion. Civilization did not penetrate or flow towards Siberia, or through the centre of Africa. Like gas compressed in a globe escaping through a small open valve, or like a material stream of liquid or of vapor, civilization spread over and flowed across broad, open areas of the horizon.

It moved towards the seashore, there finding

greater amplitude and stimulus. It enjoyed the ever-bright sun and the shining sea. The light, and the stars of the Orient, were its guide over the surface of the planet.

The phenomenon can be readily understood. With intelligence but partially awake, if the human creature reaches the shore of some beautiful sea illuminated by the light of the sun, he will gain an idea of the omnipotence of the elements, and be filled with a desire to fathom the unknown and to explore the vast expanses by which he is surrounded. The lungs expand to the ambient air; the heart dilates and the light penetrates the mind.

This was the ancient phenomena, the desire for expansion and domination inspired in our ancestors by the sight of the sea and the light of the sun. This was at first felt by the senses; later, it made an impression upon thought and, finally, became an inspiration to action.

It was in this way that civilization spread towards Europe. It found a footing in Greece, and from the heights of Olympus shed light in all directions.

It thence traveled to Rome, reflecting its light from the waters of the Tiber. It flashed to Marseilles and to Cadiz, and later passed along the Seine to Paris. The human seed, already feeling the influence of light, crossed the channels and settled in Great Britain and the Low Countries.

Those who remained in Italy penetrated the interior regions and peopled Gaul. Man germinates in the valleys of the Danube, and amid the fogs of Russia. He invades and conquers all of Europe for his use.

And the sunlight proceeds along the same road, following, aiding and strengthening the human spirit. Greece, brightened by a most beautiful sun, and being in easy communication with Egypt, the fountain of civilization, is aroused to unparalleled mental activity. Physically and morally, the skies of Greece sent their radiance in all directions, working marvels and laying the foundation of the modern world.

Italy was illuminated also by the powerful influence of its sky and its sunshine, and it conquered the known world.

The same thing occurred in the islands of the Mediterranean and in Marseilles and Cadiz. From Africa and Asia to Europe, was but a step, and civilization crossed the strait, just as a star-beam, penetrating the ether, propagates waves, crosses space and flows over and beyond the unobstructed horizons. The human spirit illuminated in the East, was like a Leyden jar spreading its vibrations and its rays upon the merest contact with conducting bodies.

So that for the progress and spread of civilization, fields and mediums are necessary, transmitting agents, conductors, clear horizons, roads, ships and regions illuminated by the light of the sun.

On the other hand the tribes that spread over Gaul, and Germany, and throughout Scythia, or in other words tribes that went into poorly illuminated regions, slept during ages. There was no intellectual activity in these regions until after the lapse of a very long period. Iron and conquest were necessary to arouse them. They required the intervention of force, the prestige

and illumination of the conquerors. The Roman legions, in truth, carried the pike in one hand, but they bore a light in the other. Every wound transfigured the savage, awakening and lighting up his heart. Combat created the soul of the Gauls. The ideal Latin language entered, triumphed and edified. Religions, born in the Orient, found inlet to the minds of the barbarians.

All the sparks intermingled, the waves clashed and the collision was always in obedience to the law that governs the movement of bodies and the propagation of light. The human spirit found a congenial atmosphere under clear skies and wherever means of communication were easy. Constantinople, Spain, Paris, came to light. New centers glittered, reflecting the brilliant rays of the sun. New lights were created destined to distribute the illumination of the human spirit. Each of these was a new nucleus and emporium of civilization.

In the meantime, England, discovered by the Phoenicians, remained wrapped in a mantle of darkness until the waters of the Thames were touched with the iron rod of the Norman.

The grand law made no mistake. The human spirit was first formed under the influence of the vivifying light.

Why does that light, that supreme and sublime *fiat lux*, follow man, smoothing his path and at the same time dispelling darkness from his spirit? The sacred fire, the merciful light adored by the Aryan accompanies us; it is the star which has guided us; the sun that never sets; the mystery that palpitates eternally in the vitals of the world.

Centuries later, guided by the same law, and traveling in the line of light, Columbus entered the New World, doubling the planet. His mind had been illuminated in the wide reaches of the sea, under intense radiations, and it shone in its turn. From his being issued all the energy that palpitated in his soul, formed there with all the intellectual strength of an expansive race. In the New World the Spaniards found the same omnipotent and sublime phenomenon, although they did not understand it. They found an advanced civilization among the American nations that worshipped the Sun, that is, in Mexico, Central America and Peru, regions physically and morally illuminated by the light of the sun.

Why do these lights travel together? Why are they inseparable twins? What apocalyptic union exists between them? Man appears everywhere and his intellect glitters in the brilliance of the supreme law of the *fiat lux*.

But we must not confound light with heat. Civilization which is subject to excessive heat becomes atrophied and calcined, like vegetation. In Ecuador and in the Desert of Sahara, civilization does not prosper. The same result occurs in places of intense cold. There is a limit, an average, a true exponent for the equation of the spirit. Like light it needs an appropriate medium for the propagation of its waves. Beyond appropriate limits, the resultant becomes converted into a negative quantity. This is the result of a singular fact which bears a relation to the vital force of the human being. Excessively warm or excessively cold regions are not suitable for human life.

This fact is an additional proof of the intimate relation existing between the body and the spirit.

For these simple reasons, civilization did not rapidly pass on to Siberia. Likewise, it could not prosper in Russia, England or Gaul, nor could it cross the Desert of Sahara. It sought a home in the lands best fitted for human life, since the highest aspiration of created beings is to live and endure. It also sought the unobstructed horizon and clear atmosphere wherein the soul expands and all nature smiles. Humanity wished to see, before it wanted to understand. It did not know that seeing things would help to a better understanding of them. It allowed itself heedlessly to be guided by the light, by the beneficent sunbeams. It engraved the image of the sun everywhere—upon stones, tombs, altars, and on the human conscience, in a manner so indelible that hardly any modern religious rite is without some emblem of the light. The eyes were always the medium of illumination, that is to say they were the organs charged with the diffusion of the light and its transmission to the interior of our organism.

There is another law which governs the progress of civilization, and which is founded upon the laws of organic matter. Nations have birth, growth and decay, like the individual man. They have their periods of infancy, virility and old age. They are born, grow, reproduce and die, like the trees. They place themselves in juxtaposition, like the particles of minerals. And in the social life there are many remarkable circumstances that coincide with the physiological necessities of organized beings. Social life has

its special characteristics, its physics and mechanics.

The growth of nations continues as long as the social soul possesses energy and aspirations, ideals to be developed or attained, while individual tendencies blend in a single resultant or general tendency which is promotive of life and creation. On the other hand, nations decay when the collective soul loses its strength and the organism becomes impaired, exactly as happens in the case of the individual.

From the inception of the social organism, forces and tendencies are created which grow and develop through the operation of the collective strength of its separate members. These forces and tendencies represent the sum of individual activities. The total of these activities directs society into a certain, determined path of life and movement. There is progress and awakening, as long as these forces increase and endure; decadence ensues when they become enfeebled or disappear. Such is the life, and such the death, of nations; their virility and old age.

Let us revert to the example of Egypt. That nation developed through the constant efforts and activities of all of its children, we might say through the virtues of its citizens. They conquered the desert and overcame the sterility of the soil. Nature partially assisted them by suggestion; and they, in their turn, helped Nature. The waters of the Nile rose, and overflowing the land deposited its sediment, which was suitable for the planting of seed. Instructed by the phenomenon, the Egyptians constructed dykes

canals and lakes for irrigation purposes. Persevering in this labor, the Egyptian people acquired strength, experience and knowledge. Devoted to labor, the nation grew and prospered. By degrees it acquired conveniences and wealth; and by a natural reaction after so much work, the nation desired to rest. While reposing in indolence, physiological activity and consequently the blood, the impelling force of the human body, suffered impairment.

Work, the source of physiological and social activity, was thus abandoned; but inspired by the attacks of neighboring states and inflamed by triumphs, a desire for conquest manifested itself, thus engendering another species of activity; and while decadence spread its roots in secret, the nation apparently continued its forward march, impelled by the initial impetus, as occurs in the case of the motion of physical bodies.

But the day at last arrived when the destructive, negative forces of vice and indolence dominated not only the governing classes, but the entire nation, and the Egyptian nation disappeared. It had had its declines and downfalls, and also periods of recovery, but in each succeeding century the propelling waves were weaker, and inertia took possession of the people with a firm grip. It is the same sovereign law of movement which ordains that in order to maintain uniformly accelerated motion, new forces and impulses are required. It is not necessary to recur further to history, but nevertheless if we review the history of Rome or Greece we behold the same identical picture.

Singularly suggestive is the fact that all peo-

ple prosper while they are industrious, while they are patriotic and are willing to suffer to secure welfare; and they succumb when their ideals are even partially attained. When the governing class, at least, which is the most responsible in the career of nations, obtains partial felicity, society decays and dies.

It is clear, therefore, that the social entity exists as an organism endowed with will; that it is intolerant of extremes, whether superabundant wealth or surplus happiness; and this is so in order that the vital physiological stimuli may not be wanting. That entity is nobly desirous that we should all bestir ourselves and work, so that the organic forces which generate spiritual strength may not be wasted. It does not wish us to neglect material life, since the social world depends upon the material. Neither does it wish that we should live perpetually in gloom, deprived of the stimulus of light, the sole and divine fountain of universal movement, the seed of all life.

Both in ancient and modern times, philosophers have existed who have uttered sublime truths. One of them said that if God did not exist it would be necessary to invent Him, so that He might guide humanity with His supreme precepts. We do not know, however, whether any of them has declared that work is the eternal law of life. Nature itself would be unable to exist without work. It works and labors eternally, presenting to successive generations of mankind the wonders of its operations.

It is regrettable to have to state that among the inferior animals there are many who display

more intelligence and provision in this respect than man. Ants never abandon work. If society is to endure, it must be like a beehive, always at work and always looking towards the future.

It is evident that conquest, although it may be beneficial to the conquered nation, in that it arouses its intelligence, brings evil to the conqueror, since it induces vice and indolence. In this manner some nations descend and fall, while others rise and become rejuvenated, for such is the supreme law.

With the advent of imperialism, the worms of decomposition begin breeding in the darkness, and the nation commences to prey upon its own vitals.

CHAPTER IX.

SUNLIGHT AND CIVILIZATION.

VERY simple phenomena are of daily occurrence which reveal the influence of the elements of creation and of other beings and things upon our life. At night sleep assumes sway over man and other animals.

Life, the impulse towards movement and joy, awakens in man and in all animals in the morning, when the rays of the sun appear above the horizon. In the darkness of the night, man thinks but little, being overcome with fatigue. Throughout the day he thinks more and has greater energy for work.

It seems, therefore, that under the influence of night, the functions of the human body tend toward paralysis, and that under the influence of light man recovers his vigor, strength and thought.

The human blood exposed, daily, during certain hours to the light of the sun, gains in health and physiological quality. If, on the contrary, it be kept in darkness for a long time, it loses in health, vigor and strength. This proves the truth of the proverb: *The doctor enters the house from which the sun is excluded.* This proverb is an axiom of life.

While the blood under solar influence retains and gains in health and vigor, the mind is also, correlatively, healthful and in good condition for intellectual work.

When, on the contrary, man flees from the sunlight and dwells in darkness, besides enfeebling the body, he weakens the mind, and the spirit also becomes impaired beyond expression. The human being, under such circumstances, feels heavy and oppressed both in body and soul; the spirit droops, the limbs weaken, physical and moral suffering supervene, and sometimes fatal illness, or perhaps a tendency to suicide may result from such isolation. In a word, the man becomes neurasthenic. The blood loses its rich, red color and the skin assumes the aenemic pallor.

From this simple statement of fact, are we not justified in declaring that light is an elixir of life, a spirit, or ethereal wave that gives strength and energy to man; that it comes from space, from the infinite, from the sun and the stars to warm, revive and restore the human soul?

With entire conviction and truth we may declare that light is the life of beings. The brilliant, luminous eye indicates intelligence in man, and even in the inferior animals. The visual angle of the man of genius seems greater, and there is always something exceptional observable in his pupil, not only as the result of suggestion, but from the innate strength of his spirit and the intensity of his glance. We can appreciate this fact by observing that the intelligence of animals is in direct proportion to their angle of vision. The angle of human vision is greatest, because of man's upright position; the monkey, the horse and the dog possess these qualities in a large degree, while birds have them all, as the

latter are able to gaze at the sky and scan space in all directions. Many birds are endowed with the musical sense, in a high degree of development and, like ancestral man, they exhibit their joy at the dawning of the day and chant their matins to the sun. Some of them, like the parrot, learn the use of speech by dint of education, not, as many believe, without understanding the meaning of what they say, for it is well known that they are capable of appropriately applying their vocabulary, sometimes in a very remarkable manner, to fit the occasion. Fish, on the contrary, whose eye is opaque and only adapted to see objects in the water, possess but a very small measure of intellectual faculties.

From all this we are justified in making the deduction that the eye is the soul of man, and that if he had been created in the darkness and for the darkness, his life would have been inactive, lazy and stupid, like that of nocturnal animals. We can, indeed we must, suppose that in such conditions man would have been incapable of thought, joy and expansion; that is to say of social life. His spirit would have remained in an embryonic state.

No one, therefore, can controvert the truth that light was the first agent of cerebral activity. If, for example, we ask ourselves what takes place within us when we pass from darkness into light, not only when we enter the light of the sun, but even into that of gas or electricity, we would answer that we feel a sense of pleasure, a desire for expansion, a certain movement of all the cells of the body. It seems as if they have set themselves in motion, acting upon one

another, as in the case of musical notes. The most inobservant would say that light produces within him a sort of spiritual and material influence. Upon feeling this influence, it would seem as though we were participants, to a large degree, in the creative power of nature. If hypothesis becomes demonstrated truth by the regularity and agreement of its laws with observable phenomena, this theory of the definite influence of light in all spiritual manifestations must be placed in the category of imperishable truths. Light was the creative agent of the sidereal as well as of the human organization; it is the divine breath of which we are told in the Scriptures.

Through its influence, the eyes, heart and mind of mortals were quickened and the knowledge of things began to be acquired. The encephalic mass vibrated slowly, but continuously; it sought space for its expansion within the cranium; there were adaptation and development. The ape, the primitive man, the being of narrow skull gradually developed into the man who, to-day, proudly proclaims the divinity of his origin.

It could be argued that all human beings live under the influence of light, and nevertheless some do not develop intelligence. In order to see the things of this world, the mere possession of eyes is not sufficient. It is necessary to learn how to employ them. The majority of human beings are spiritually blind, beholding other beings without observing them, and witnessing phenomena without seeking to learn the why and wherefore of what is passing before their eyes. Many persons have feet, but they do not

know how to walk properly; they have hands, but they cannot stoop to work. Nature provided the organs, but they require exercise, and if these are not continually cleaned by means of movement and work they become atrophied and rusty like the valves of a steam engine.

We are blind of soul and incapable of thought because we have grown from childhood in a state of ignorance, because we have no parents, or brothers, or masters to teach us how to examine and observe things carefully; to think, reason and understand. This was the advice of the ancient Greeks.

We concede that it might still further be argued that primitive man had no master and nevertheless his intelligence was awakened. Where could better masters be found than Nature and the elements? If we moderns have separated ourselves from Nature, our progenitors, on the contrary, lived with it, feeling, knowing and appreciating its infinite manifestations. The stone, the bush, the river, the vast ocean, the storm, death, were each a stimulus in the awakening of the human intelligence, although to us of modern times, these phenomena, which are the basis of truth, seem trivial and destitute of interest. Here and there an exceptional man may be found who interrogates Nature to learn her eternal truths.

In all these phenomena, the great truth prevails triumphant. Sight is the great human sense. The eye is the soul that dwells within us, as light is the soul of the universe.

History relates the fact, that the wise men of antiquity traveled in order to learn. Many il-

lustrious Greeks visited the Persians and the Egyptians. Seeking instruction, they did not delve into books only; but they explored horizons, investigating facts and phenomena, and in this manner they acquired knowledge and eloquence.

To what is this due, if not to the influence of light, to the power of vision, to the increase of cerebral vibrations?

Man feels the divine power of light and loves it with daily increasing passion. Evolution is accomplished by an intangible effort in a seemingly mysterious manner by unforeseen and unsuspected forces. Life is a continual round of slow, rude, fatiguing work; rough roads, impulses and inevitable strife. Everything creates itself in pain. It would undoubtedly seem as if suffering is necessary to the awakening of humanity.

It is not man alone that requires light in order to live. Even plants seek it, turning pale and lifeless in darkness. Every created being has need of this great essential of the universe.

Let a man go to the hilltop in the morning and bathe in the early rays of the sun, when it yields more light than heat. He will feel his intelligence more active then than at mid-day. In this way one may comprehend how much his intelligence gains from the light; how bright his reason becomes, how thought awakens to activity, and how he feels the joy of living.

But these sensations are necessarily relative. He who has lived in ignorance, and does not love or appreciate the light cannot experience the phenomenon. The light will fall upon his body as it would upon a tree.

Furthermore, a marked intellectual difference exists among the nations of the earth, and this difference corresponds to the intensity of light and heat to which they are respectively subject. Life, physical and intellectual, develops rapidly in the tropics. It enjoys longevity and good health in warm countries. It languishes in very cold countries. In warm countries intelligence is more precocious and imaginative, while in cold regions the spirit is more tranquil, more given to reflection. In frozen latitudes man develops very slowly.

It is, therefore, clear that civilization holds supreme and indestructible relations with light; that it follows its rays, and that it has developed under its influence, spreading itself among those nations in which light could vibrate, reflect and refract without obstacles, such as forests and mountains. So that, in truth, the radiations of civilization may be compared with the luminous radiations of the sun. Barriers in the trajectory will change the path, in pursuance of the same laws. Obstacles produce shadow upon the earth or in the spirit, as the case may be.

These facts lead logically to the statement of a great law, namely that light is the spirit of life, physically and morally. Life in both its physical and spiritual manifestations is but an unfolding of a single essence; that is to say, a duplex manifestation of the great spirit that circulates through the vitals of the universe.

The Creator of all things is throned in the heart of the light, which is the pure Virgin, the Immaculate, Holy Mother of the human race. The Son of Man was born of its divine rays,

springing from infinity to become incarnate upon the earth.

Man's cerebrum has undergone development, just the same as his muscle, under the influence of luminous vibrations. It was a development of Creation itself which furnished the seed, or mass of living matter capable of movement. The human cerebrum has grown and yielded fruit upon the earth, aided by the agents of revealed Creation.

As intelligence is a spiritual development resulting from the operation of matter, it is exposed to infirmity, if the matter constituting it does not continuously renew its forces, or if it ceases to enjoy the beneficent influence of solar light.

Poets, writers, philosophers, in a word, the thinkers of the world, are consequently more exposed to loss, ruin, madness and even death itself, if they abandon the physical influences and, despising matter, deliver themselves up entirely to spiritual life. This, and this alone, is the cause of the hysteria and madness from which persons devoted to mysticism have frequently suffered in all ages.

Intelligence being, then, a product of the movement of cerebral matter the quality of which, in its turn, depends on the entire organism, the product must be poor if the material be inferior, or if it suffer or is otherwise impaired in health. It is necessary to take care of the body in order to preserve the soul from sorrow and death.

CHAPTER X.

LUMINOUS RADIATIONS AND SPIRITUAL RADIATIONS.

THE marvellous identity of light and spirit is felt with greater clearness on making a comparison of the laws of optics with the phenomena of intellectual diffusion.

Science declares that light is a determined movement of imponderable matter, or in other words, a manifestation of ether revealing objects and beings to our vision.

It may be said without error that the soul, spirit or consciousness, is the internal manifestation of that movement transmitted to the heart and brain through vibrations of the nervous system.

It will, therefore, be understood that the movement of ether does not terminate at the eye, but continues its course along the optic nerve to the brain, thence passing to the heart, affecting the blood and producing what we might call spiritual vision.

This conception of the soul, or spirit, or consciousness, explains quite clearly the intimate relations that manifest themselves between matter and spirit; the alternation of physiological functions during intellectual work and the weakness occasioned by excessive mental labor; that is to say, it explains the indestructible relation existing between the body and the soul.

But the spirit also receives impressions and manifestations which do not enter through the eyes. This is another evidence of the identity of exterior ether with that which circulates in the body of animals. There are suggestions, electrical inductions, magnetic communication between the external movements of ponderable or imponderable matter, and the movements of the spirit. Whether animals understand it or not, sensations, impressions and thoughts can communicate themselves, and this whether the organisms are in contact or apart. This is another and certain, concrete manifestation of the ether circulating through the vessels of the universe.

The material of our own bodies and that of other animals is, therefore, fitted to receive, reproduce and transmit the phenomena of what is called imponderable matter. It is adapted from birth to the exercising, developing and bringing to perfection of these spiritual functions. Like a machine, it is susceptible of motion, according as it is exercised, cleaned, oiled and kept in good condition or neglected. It is either sound or defective, and as the body is composed of living organs automatically capable of sensation, it not only produces material work, but also spiritual, engendering its own soul by the force of exercise. This spirit is forever forming itself, developing and striving towards perfection, and it is capable of acquiring marvellous powers through ethereal manifestations. The body seems to be a condensation of all manifestations of matter, and it seems to have sprung from the intimate union of all those manifestations. It seems to have been formed like all things and creatures,

by determined and concrete movements of the mysterious agent or soul of the universe which we call ether.

It is no exaggeration to say that there is within us an internal light illuminating the recesses of our being, in the same way as the light of the sun illuminates external objects. They are vibrations and undulations of the same light, but in different manifestations, recognized as physical vision and intellectual vision.

The power of that spirit or imponderable matter which dwells within us is in direct ratio to the number of phenomena presented to our eyes or other senses. The two lights, or rather the waves, blend or collide, and they create knowledge, sensation or sentiment.

The ether, therefore, exists everywhere, moving and palpitating with varying intensity in all beings and things, even in inorganic bodies that are apparently lifeless. It dwells in the animal as well as in man; it resides in all cells and organs, and vibrates and undulates eternally, producing light, heat, electricity, sound, magnetism and spirit. The manifestations of ether are six-fold, and these six manifestations are capable of transforming themselves, communicating and blending with one another, or of dissolving and returning to their original state, according to the velocity of their undulations. They are one in essence, but multiple in their phenomena.

Let us continue to compare the phenomena. Science teaches that light flows in a straight line through a homogeneous medium. Spirit propagates itself in the same manner. If there be no

intervening body to intercept it, the undulation passes from individual to individual, from nation to nation. The fewer the obstacles, the more diaphanous the atmosphere and the straighter the road, the greater will be the efficacy with which spirits will hold communion with one another, and the more readily and completely will they understand each other. The eye, itself, is fitted to send forth a ray, a thought, a desire and transmit it to a distance with greater force and intensity, the more profound the agitation of the nerves and ether. The intercerebral ether alone, without the intervention of the eye, is capable through vibrations and undulations, and by its own force, of engendering a desire or creating a thought in an individual or individuals who are near, and even in those who are absent.

This necessarily has a limit, depending upon the power of the spirit and the amount of sympathy and harmony, acquaintance or friendship existing between the persons, as may be seen from the following law:

The intensity of light varies in direct ratio to the mass and in inverse ratio to the square of the distance.

We may observe, in passing, that this law also operates upon the power of universal gravitation, enabling us to prove the identity of the laws that govern the physical and the moral worlds.

In like manner the intensity of the spirit varies in propagation. Intellectual manifestations are clearer and more perceptible to those who are in personal contact with us, whose attention is fixed upon us, who are within our field of vision and witness our acts and gestures; and these

manifestations are, of course, less visible and perceptible to those situated at greater distances.

A lecturer, for example, exercises greater influence upon those of his audience who are close to him than he does upon those farther away. The intensity of his manifestations diminishes from the centre to the periphery. At the same time the influence which he exercises upon his audience bears an intimate relation, in direct and truly mathematical proportion, to his mental power, his voice and delivery. That is to say, his influence is in proportion to what might be termed the spiritual whole, or spiritual focus.

Among the phenomena of light there is one known as shadow and penumbra, which bears a singular resemblance to the propagation of ideas, or in other words to the propagation of the spiritual light that issues from men and from nations.

When the moon is situated between the sun and the earth, a shadow falls upon the earth, and after the termination of the true eclipse, the shadow is converted into semi-obscurity, called the penumbra. Objects located in the perfect shadow are less distinctly visible than those in the penumbra.

In a similar manner when a hill or chain of mountains intercepts the spiritual manifestations of a people, the social groups located beyond the mountains, that is, those who are in the shadow, receive less spiritual light in the form of movement of ideas than those located in the semi-darkness of the penumbra. The social light of civilization emitted by the former people does not reach or communicate itself to those on the other side of the mountain; but it does reach,

although dimly, those other people who are only partially in the shadow.

If, for example, an experimenter be desirous of communicating light from a luminous focus to objects situated behind a screen, he would set up a reflector in a proper place, and the light would be reflected in a zigzag manner so as to illuminate the shadow, and in the same way civilization would require, for its dissemination, a civilized nation and intermediate reflectors.

Civilization has pursued exactly this course. It passes to the people nearest in direct communication, and then by reflection to distant communities separated by mountains or other natural barriers. From Egypt it passed to Greece, where Athens, a city situated in a most propitious atmosphere, was the first to become illuminated. There were no obstacles, no screens to intercept the civilization-waves as they flowed from Egypt, or to interfere with their prompt spiritual communication.

Thence civilization passed, although with less strength, to Sparta, and much more weakly to Macedonia, a country situated on the other side of the mountains.

Along the unobstructed path of the Mediterranean Sea, and through its luminous atmosphere, the waves of civilization flowed on to Rome, where the same phenomena occurred, the Samnites and the Volscis being the first to receive civilization, and subsequently the Gauls. Marseilles and Cadiz were illuminated in identically the same manner.

But the phenomenon is more strikingly apparent in the transition of civilization from

Europe to America. Civilization passed with greater force and intensity and with marvellous strength to the United States of America, that is to say to the land most easy of access and in most direct communication with the Old World.

In North America civilization passed from nucleus to nucleus, traveling along its navigable rivers, lakes, and later over its lines of railway. Where a path for communication was not provided by nature, it was supplied by man.

The path of civilization is consequently one of suggestions and reflections, of magnetic waves transmitted from individual to individual, or from people to people. The regular progress of both physical light and spiritual light is, in this sense, wonderfully identical.

All of this coincides with what has been stated in previous chapters with respect to the topography of countries, clear horizons and the influence of the atmosphere and the elements on human civilization.

It also agrees with another law of optics, namely: *Unbrilliant surfaces diffuse light in various directions*. The brain of man is not a brilliant surface. It receives or produces the intellectual manifestation and diffuses it in various directions. It communicates vibrations by means of the ether.

The eye of man may be compared to a brilliant and, at the same time, transparent surface. It receives and reflects light in a determined direction in accordance with the law that the angle of incidence is equal to the angle of reflection. It permits the light to pass in a determined course, like a lens, concentrating the light in the nerve

and reproducing the image of objects in a species of camera obscura. In a word it acts in perfect accord with the laws and phenomena of optics.

The similarity of the human lens and the brain with the lens and camera obscura of a photographic apparatus is truly wonderful. Man has been able to imitate the mysterious phenomenon of vision.

If the object to be reproduced in the camera obscura is over-illuminated by the sun, the image appears as if it were burned. In tropical climates the human brain presents a similar phenomenon. There the image of things produces imaginary impressions upon the mind, that is, unreal, indistinct, inexact views. In this case the introspective vision of objects, and their relation to each other, are not well defined. In tropical people the imagination predominates, and the mind, although it has more light, is less concrete in its perceptions.

Very intense spiritual radiations produce the same sort of an impression upon the human mind. They sometimes produce fainting, stupefaction, a species of combustion which frequently paralyzes circulation, occasionally causing death. The sudden sight of a great danger will often cause fainting. The cerebral apparatus suffers impairment from such impressions.

If the light be appropriate and the object be placed at a proper distance, the resulting image is clear and well defined in the photographic apparatus. The same thing occurs in the cerebral apparatus. The eye in such a case enjoys a perfect field of vision.

The cerebrum, like the sensitive paper of pho-

tography, receives and retains the image of an object. The cerebrum also retains ideas. When the object is pictured upon the sensitive paper, and the idea similarly graven upon the mind, the sensitive paper loses its power, and to a certain extent the cerebrum loses its power for the reception of other ideas. If the new ideas do not coincide with the one first received, the cerebrum rejects them. There is a collision. It is for this reason that the young mind of the child is best adapted to the reception of ideas and instruction. The grown man is refractory; he opposes ideas not in harmony with the special tendency developed in his mind during childhood.

The cerebrum of the adult man is, therefore, like used paper in photography. It is tenacious of its first impressions and beliefs and is unadapted to receive others, unless the man possess large will power and be devoted to justice and truth. In the latter event, he endeavors to appreciate things and to correct the chromatic aberration of his mind.

This truth is of wide application in teaching. Only children and the ignorant are capable of learning new ideas. It is only through the children that the regeneration of nations can be effected. As a general rule, the adult generations are incurable.

It is easier to create a tendency in a simple and ignorant people and in youthful generations, than in decadent nations or in the older generations. Ideas, opinions, prejudices have become petrified in the latter, and form their temperament or idiosyncrasy, or in other words, their second nature.

When the barbarians took possession of the Roman empire, Christianity had adherents even among the invaders; and in the early days of the Church the new doctrine was understood and cherished by the gladiators and the simple people. All the religious faith of the Middle Ages was rooted in the midst of an ignorant people.

The Reformation spread rapidly in Germany, Switzerland, and England, that is, in the younger nations. It never had a foothold in Spain. In France the reformation was developed a little less than in other parts of Gaul, despite the fact that Rousseau had written *Emile* before Pestalozzi taught.

Consequently, the true statesman resorts to the primary school, and not to laws or regulations, if he desires to transform a nation. The sensitive paper of the infantile mind is endowed with the necessary properties for the reception and comprehension of ideas.

In this way we can explain the aberrations of humanity. Light requires clear mediums for its propagation and diffusion, and similar mediums are requisite to the social world. Communities charged with prejudices, fanaticisms, laws and codes are refractory; they are almost incapable of a change of front. The majority of human minds is composed of used, unserviceable paper, or in other words, of cells which have acquired the habit of a certain class of movements, thoughts, ideas and beliefs. They cannot see, think or believe in any other way, just as a piece of red glass, for example, is incapable of diffusing or absorbing other luminous and calorific rays or any other colors of the spec-

trum than those which it has diffused and absorbed since the time of its manufacture.

In the case of humanity, the glass manufacturer is the educator, whether father or master, society or governing classes. From such educator the mind receives its color, its power of diffusion and absorption. It is, therefore, clear, as we have heretofore observed that the governing class is that which is responsible for the destinies of the nation. The people are not to blame.



CHAPTER XI.

SPIRITUAL WAVES.

SCIENCE teaches that luminous vibrations may be concordant or discordant.

When two waves of light proceeding from different centres are united at a given point, the light increases or diminishes according as these waves are concordant or not.

This law is the basis of the social world; it is the law that governs the propagation of spiritual waves. Ideas, which are the intellectual manifestations of individuals, groups, or societies, coalesce and are understood, more or less easily, if they possess the quality of concordance. The ideas, if concordant, increase the spiritual radiation and form a more powerful nucleus of diffusion.

But if the ideas be antagonistic, that is to say, if they be discordant, the resulting radiation will be equivalent to the difference between the components. Therefore, in controversies and discussions, the more antagonistic the ideas of the contending parties, the less the reader or the audience gains from the debate.

The study of this phenomenon is singular and suggestive, and demonstrates the identity of spiritual waves with those of light.

If we illuminate a room with the feeble light of one candle, we shall see objects within our range of vision, in semi-darkness. The more distant objects will, of course, be seen the less

clearly. If we add another candle, exactly equal in power to the first, the light will, of course, be increased in the room, and will equal the sum of the two lights. In like manner the light will go on increasing according as we place one, two or three additional candles like the first and producing the same kind of light.

This phenomenon is noticeable in a city illuminated by gas or electricity. If we place a focus of light in a park, the place will be slightly illuminated. If we increase the number of light-centres, placing others in the same park, in the streets, towers or minarets, the illumination will increase in direct proportion to the number of centres, the lights of all producing a brilliant illumination.

In the same city there will be places, alleys and angles poorly lighted, because of walls, corners and buildings acting as screens to intercept the light.

This is strikingly similar to the diffusion and propagation of spiritual waves. In ancient times, in the region of the Mediterranean, civilization was propagated in conformity with this law. Various nuclei of similar spiritual light were formed from the Aryan stock. These centres were established in Egypt, Asia Minor, Greece, Rome, Sicily and other places. All of these lights, similar in origin, undulations, ideas and tendencies, were shining together during a certain period of time, and were even concentrated in a general centre of illumination in Greece and, later, in Rome.

But there came a time when new ideas, manifestations and tendencies were germinated, de-

veloped and propagated in each of these nations. Then a diminution of light supervened, in pursuance of another physical law, viz., that *waves of light proceeding from different sources increase or diminish the illumination at a given point, according as the waves are concordant or otherwise.*

The wondrous path of civilization has been illuminated exactly in this manner. While individuals present like tendencies, the sum of the individuals, that is, the nation, will advance towards the highest point of its evolution. As soon as contrary tendencies begin to develop, the entire organism loses strength, and its waves of progress recede. There is a diminution of strength and potency.

It is well known that communities have a general evolutive soul. This may be in harmony with, or antagonistic to the soul of another nation. During the period of concordance, the two nations will contribute a double share to the civilization of others and of themselves. When discordance and conflict between tendencies exist, the illumination will be less, and the spirit of the nation enjoying the more favorable conditions and aptitudes for life will prevail.

Hence, in Rome when the tendency toward conquest manifested itself, a tendency diametrically opposite to that of agriculture, a diminution of both forces took place. The wave of progress vacillated; the great empire remained stationary for a time and, at last, the negative force was victorious.

In the same way the United States of America reached their culmination impelled by the agri-

cultural wave and by concordant tendencies and ideals. In the present age another tendency has sprung into existence, that is, towards imperialism, which is entirely at variance with the condition of freedom and justice requisite for the cultivation of the soil; and the great republic is commencing to vacillate. The recession is already visible.

Similarly, the Argentine Republic is growing. Within its borders a multitude of persons of the Latin race find shelter, demonstrating the fact that with lands and easy means of communication every race may advance. The American luminous centres are shining in all directions, like those of the ancient Mediterranean Sea, and the diffusion of spiritual currents pursues its course in strict compliance with the law of movement.

It is needless to cite more examples. History repeats itself in the life of all of the nations of the earth, ancient and modern.

It is, therefore, clear that waves of light, and spiritual waves, to propagate themselves require concordance and identity in the vibrations, creating a similarity of tendencies, ideals and common aspirations.

This law explains a multitude of social phenomena which have hitherto been regarded as anomalies. Ancient and modern nations have grown, like individuals, with greater health, strength and vigor in the early years of their evolution, unless they have been deformed by conquest, by being forced to accept an education leading to the destruction of will power and character; that is to say, unless the propelling waves were destroyed at birth by extraneous

force, as happened to the races of the New World.

Nations remain stationary and decay, according as tendencies and occupations contrary to activity and life begin to preponderate, and this in the physical as well as in the spiritual world.

By reason of these causes, there are individuals, groups, nations, that understand each other; while, on the other hand, there are nations and individuals that clash and are at deadly enmity. Their tendencies not being in concord, because of difference of language, ambition, destiny or desire for conquest, they live in perpetual conflict with one another.

Consequently, the progress of civilization throughout the centuries has, like the light that comes to us from the astral bodies, been subject to interference, diminution and clashings, due to the interposition of new waves, aberrations, reflection and to more or less partial eclipses.

We can thus understand the principal cause of difference in the tendencies of nations, and the formation, through clashings, of a resulting general tendency in human society.

We behold with wonder how the language of the physical sciences, and chiefly that of optics, is applicable to the social world.

The structure of Sociology is founded upon Physics, and the laws of ponderable matter are similar to the laws of imponderable matter, as is shown in the course of this work.

This wonderful law of sociology also explains the beneficent or evil influence which a government, or directing nucleus, can exercise upon the onward march of a people, since in such nucleus

is concentrated all of the forces capable of enlargement or retrocession.

The same law reveals the necessity for the directing nucleus, that is, the Government or the individuals selected by the people to discharge public functions, to receive appropriate education in the science of Sociology. They would thus be qualified to multiply the forces and currents of civilization, unifying their tendencies by means of the school and work, and at the same time nullifying or destroying opposing forces.

Deliberate assemblies present phenomena which are clearly explainable by reference to the law just mentioned. An orator speaks and moulds the opinion of a majority of his listeners. While they listen to him attentively, they are unable to resist his influence, especially if he be a true orator. The speaker is followed by another who controverts the opinions of the first, presenting the opposite view, and if he be endowed with a similar measure of eloquence, the audience begins to waver. When both influences cease to operate, the audience is possessed only of the resultant of both forces, which resultant is likely to be weak.

On account of the repeated observance of this fact, a reactionary tendency has arisen in the world against the jury system. While the jury are listening to the orator, and even after he has ceased to be heard, if he were sufficiently suggestive or convincing, the jury is completely under the dominion of his ideas, will and interest for the side he has espoused. Justice triumphs or is outraged, as the case may be, but in either event the result has been reached un-

consciously and in a manner inconsistent with the august function of Justice.

On the other hand, when many orators, in succession, maintain the same tendencies and ideals with ardor and conviction, the forces or currents united, swell to majestic proportions and overflow. This happens in times of great revolutions.

Let us imagine for a moment the effect of the illumination produced by the sun in the entire planetary system, and the intensely diversified path which the luminous undulations pursue from one planet to another through different atmospheres, and we may understand the final and general resultant, the manner of propagation of the waves of civilization, their progressive radiations and their periods of transition or decline.

Place clouds between the sun and the earth and the light, that reaches us will be opaque, in accordance with the density of the nebulous mass. This represents the role played in the drama of civilization by errors and false doctrines. These have been the clouds in the clear, limpid, magnificent sky. The species of petrification which political, legal or religious fanaticism has produced, and still produces, in the multitude, prejudices the progress of civilization during determined periods. When the combined tendencies and ideas of these fanaticisms become evidently injurious to the social organism, a reaction takes place, and this reaction is always led or directed by the brightest and wisest minds in the community.

Recalling the example, or simile, which we cited in relation to the sun, it is easy to show that for civilization, as for the propagation of

light, we need to clear the horizon; to open roads and build railways; to communicate by means of steamships with civilized nations; to prepare intelligence by education tending to the development of individual energy and activity and to the illumination of the judgment. We must destroy the obstacles; tunnel or rive mountains; dispel prejudices, whether legal, religious or political.

It is necessary to create an atmosphere appropriate for the transmission of civilization, a medium permitting the interchange of ideas, the diffusion of regenerative principles, and chiefly the development of strong, healthy, robust individualities.

As the petrified judgment of adult generations is, generally, opposed to progress, it is the duty of the governing class to aim at perfection, heedless of reactionaries. Nature weeds out the old generations slowly but surely. Sooner or later they must pay tribute to death; and it is, therefore, sufficient to isolate the children, by placing them in schools in the country remote from error-laden atmospheres. This is the noble tendency of modern pedagogy.

It is improper to counsel violence in order to create and progress. Evolution is preferable to revolution, because evolution is the inevitable law of transformation and perfection—the royal road of the social world. Ponderable and imponderable matter mingle, combine and create by means of concordant waves. Discordant waves produce destruction and cataclysms.

We may conclude the chapter by saying that luminous waves and spiritual waves are general

in their manifestations and creations; they flow from the same source; they are the offspring of a universal, ethereal spirit.

The laws of optics are identical with the laws of the human spirit. Introspective vision is the soul and conscience of individuals and societies. Psychology is the optics of intellectual life, of that vision or consciousness of things which dwells within us and makes itself manifest in intellectual movement, capable of communication with the exterior world and with ponderable or imponderable matter by means of physical vision.

The universal ether permeates our bodies and gives life to our cells. It moves within us in absolute harmony with light, heat, electricity and magnetism, producing intelligence through the powerful characteristic of the organized atom. Intelligence is the result of the movement of all the cerebral atoms, agitated and impelled by the luminous waves issuing from all beings and things of the universe. It is, therefore, susceptible of continuous development, education and perfection, like everything that exists; it is also susceptible to aberration, dissociation and death.

From the time of birth the eye of the child accumulates a treasury of impressions, gradually producing memory and a sense of relations. The soul develops through contact with the external world, while another, a spiritual world, is born within us and grows, develops and dies like all things of the universe.

Hence it is that there is such a singular diversity in intelligence. All children do not learn to see, feel and touch objects with the same intensity, nor in the same way. All great men have

had great mothers. We are impressed with truth through the medium of the senses and by direct observation, and not by theory or lessons learned in the books. Consequently, experimental science will triumph in this world, and the day must come when it will be the great pedestal of religion and dogma.

CHAPTER XII.

SOCIAL MECHANICS.

LET us recall the example of the lights of a park or city. It presents remarkable analogies to the phenomenon of the propagation and movement of spiritual waves and currents that form the general soul of nations and of humanity.

The park illuminated from different centres will be better lighted in the places where the centres are of greater power. And if the lights be of different characters, or of discordant vibrations with respect to others, those of greatest power would prevail. If close to a small focus of red light, a larger focus of green light be placed, the effect of the red light will not be appreciable. The verdant illumination will prevail and be equivalent to the intensity of the difference between the two lights.

If we add lights of different colors, the illumination will partake of the radiations from all, and the park would present a very singular appearance. The resultant of all those lights will certainly not be equivalent to the sum of them, but to their difference. A case might be stated where by reason of the mathematical relation of the intensities, the park instead of being illuminated would be darkened.

These singularities of light are observable also when light is placed close to colored curtains or colored tapestries. White light loses some of its lustre in a room hung with red tapestries. The

red absorbs certain colors, thus causing a real subtraction. If the room were tapestried in white, the illumination would correspond exactly with the quantity of light issued from the focus. In this case there would be no loss.

The phenomena of spiritual radiations, which are the civilization-currents of a people, are similar to those of light. When the current of Christianity was produced at Galilee, its propagation was quite restricted, but by reason of its illuminating qualities it gradually progressed. During its struggles with paganism it grew rapidly, converting multitudes of people. But in the time of Constantine the Great, the two currents were of almost equal strength, and confusion naturally resulted. In the present age, for example, it would be quite difficult to ascertain the ideas referable to each of those religions. The ideas and the religions have commingled and their power, or civilization-current, is equal to the resultant between the two primitive currents, which in reality had their origin in the beginnings of society.

Reverting to the civilizing tendencies of the Aryan people which we have justly taken as a type because the nucleus which they formed was more powerfully civilizing, we will remember that in the first place families, tribes and social centres were formed. Each centre sent forth, according to its habits and occupations, a spiritual tendency towards a special manner of moral and physical development.

The legend of Cain makes clear to us the analogy we have been analyzing. Cain killed his brother Abel through envy of his virtue. This

implies an altercation, a clash or discordance of ideas between the two, whether we consider them as individuals or as collective entities.

It is well known that in the dawn of social life, humanity supported itself by fruit. There came a time when the fruit failed, and it became necessary to work and cultivate the earth in order to derive subsistence from it. Men divided into groups. Some turned to agriculture; others to pastoral life; others to fishing. These different occupations gave each group a different character, habits and physical and intellectual power. The character of the first nucleus, or progenitor, underwent ramification.

These differences are clearly understood in the present age. There is even now a certain hostility observable between the shepherd and the husbandman. The farmer protects his field of wheat or maize by placing a fence around it. The cattle break the fence, causing damage to the property and creating a dispute. Litigation supervenes. Hence the law recognizes these differences and protects the farmer from damage on the part of the shepherd.

The ancestral struggle must have been something like that. Cain had one occupation and Abel another. One was the stronger and more vigorous of the two. The weaker died in the struggle. There was divergence of ideas, character, habits and customs; and from this point it is but a step to a difference in the manner of comprehending the divinity. The spirit or soul of each individual sympathized with those ideas most in accord with his temperament and character.

Discord existing between these two Biblical characters, their tendencies would not unite; and the result was in favor of the more vigorous and intelligent of the two, namely, of the farmer, who has always been the founder of great nationalities and distinguished virtues, due to his relation to the soil and to the innumerable phenomena of nature, the source of all truth and consequently of morality.

The two opposing forces having clashed, the victory was won by the tiller of the soil, the lover of Mother Earth.

This love of the soil was the origin of patriotism, giving stability to society and bringing forth the state, whether democratic or monarchic.

It is unnecessary to resort to history to prove that this was the most powerful civilizing wave of ancient times. Its maxims and social currents, grounded in habit and custom, are found compiled in the religious code of Zoroaster. All the races springing from the agricultural branch of the human tree were and still are the most powerful and civilizing of the earth. The ancient people from whom we sprang and whose ideas we still share, those early founders of the fatherland and the state, began by sanctifying the cultivation of the land, saying with the Aryan philosopher: "Blessed is he who builds a house here below, in which fire is kept burning and where there is grain, a wife, children and a good flock. He cultivates purity who makes wheat spring from the earth, and cultivates the fruit of the field." This manner of life gave origin to the two strongest bonds of society and to true progress in the social world.

The conflict of which we have been speaking was not ephemeral. It lasted for years, centuries and is even now in progress. It is sufficient to take as an example the wonderful development of the United States of America which, like Rome, began as a farming colony, presenting remarkable examples of civic virtues which are gradually deteriorating by reason of devotion to commerce and other modes of life.

If we confine our attention to one of these branches and examine its development, the example of the lights will give us the key to social dynamics.

Let us continue the consideration of the agricultural branch, as a type. The father plowed the land and sowed the seed, the wife and children assisting him in his labor. The children grew up on the farm, close to the cultivated land, sowing the seed with their own hands and bathing in the streams that irrigated the fields. Thus a love for the land was developed within them, and they partook of the same character and temperament as the father; and as if all the vessels, arteries and viscera of his body, the component cells of his arms and of his legs; the cells of his brain and the light of his eyes formed one harmonious stream of concordant waves which united and was not subtracted from, the children also devoted themselves to the cultivation of the soil.

This is the habit, or result, or tendency of a combination of forces created and directed in a certain path from infancy. When such a result takes a powerful form, a man, although he might desire to do so, cannot withdraw from the move-

ment of the cultivated and developed forces. It seems as if the physical organism and the spirit itself agitate, and flow and vibrate in a manner that draws the man towards a certain course.

It will be understood, logically, that different families devoted to the cultivation of the soil, were bound to agree and coincide in tendencies and ideals. Their bonds of union became closer and firmer, and the combined social mass moved towards a general objective indicated by the sum of individual concordant forces.

But there were times when danger obliged the tribe to fight and defend itself against the enemy. The adversary attacked the city. It was necessary to form a governing centre to act as a sentinel charged with guarding the city while the others were at work. In this manner another element, or new current, was formed; that is to say, the governing nucleus which, in the beginning, was both sacerdotal and martial.

These classes, however, lived a different life from that led by the ancestor. While the laboring class cultivated the land and devoted itself to work, the other branches, but chiefly the sacerdotal, lived in idleness, their intelligence developing at the expense of their physical vigor. Thanks to intelligence, however, and to the strength of government cohesion, they organized and defended the state.

In the course of time, through habits of domination and pride, acquired by the ruling castes, the burdens of the agricultural population became very heavy, and their lives very sad. The upper class despised and enslaved the agricultural, the result of which was that the original agri-

cultural branch of society suffered a partial separation from the general tendency. It wanted to shake off the yoke of the oppressor. There was rebellion, conflict and disintegration.

The superior castes, in the course of time, fought among themselves, because of their ambition for power, the desire for which was implanted in their very beings by habits of command.

The nascent state was consequently divided; and, as if the new streams were contrary forces applied at a given point, their resultant was the general current or tendency of the state, and this resultant was either neutral or powerful, according to the greater or lesser potential of the victorious force. Occasionally, the superior classes coalesced, inspired by the same ambition for authority; and the state proceeded in the path marked out for it by the combined forces, unless it happened that the agricultural element, united and rebellious, struggled with greater force against the other two.

The world has thus been governed in manifest harmony with the mechanical law of action and reaction, a remarkable subjection to the principles governing the movement of the pendulum and specific gravity being observable. Society swings with rhythmic movement and singular regularity, when it is at peace, and obeys the forces of evolution. The moment, however, that revolutionary and turbulent forces attempt to drive it beyond proper limits, the balance is broken, and the movement is disorganized. Through the action of the violence to which it is subjected, society may maintain itself in disorder, as long as

the extraneous influence prevails; but, when this is removed, society immediately and spontaneously flies to the other extreme, thus delaying, for a time, a reversion to true equilibrium, like the waves of the sea, after the passage of the storm. So that revolutions are obstacles in the path of general progress.

A slight acquaintance with history and the revolutionary epochs of the nations of the earth, will suffice to prove this truth. The tendencies of persons having similar ideas, engaged in like occupations, and who are of the same general character, acquire greater force, the greater the potential of their component forces. All the individuals apply themselves, then, to a certain point, to promote progress; and concord is manifested in a spirit of union and patriotism; that is to say, a national soul has sprung into existence. The magnet which draws to itself needles or filings within its sphere of action, affords us a concrete image of the phenomenon. The needles become magnetised in their turn, and a nucleus is formed, which is exactly similar to social centres charged with similar tendencies and ideas. The social atoms, like atoms of iron, are also magnetised, and are attracted to one another by reciprocal concordant waves.

If we place another magnet and filings or needles in another circuit, a new nucleus will be formed. On bringing the two centres near to each other, we shall observe that the one having the greatest power will draw the weaker one to it, thus forming a still more powerful centre.

The force of suggestion presented by the social world is exactly analogous. The different social

currents may repel or attract, like electric waves. There is, consequently, movement, or a sum of movement, a co-efficient of motion, an impelling velocity and new forces in the social world, and a general tendency or resultant; and the most wonderful thing of all is, that the laws of inertia, statics and dynamics, are entirely applicable to social movement.

The city, or newly-formed state, may be compared with the phenomena which has served as a basis for the establishment of the laws of planetary motion. If we attach a ball to the end of a cord, and take the other end of the cord in hand, for the purpose of giving the ball a circular motion, we shall feel, on swinging the ball around, that it tends to fly off at the tangent, while, at the same time, we restrain it, and keep it in its circular movement around the hand. This is the function of government in the state. The government is the centre, to which cities, communities or individuals have reference. All of these are affected by the spontaneous and natural impulse or tendency to liberate themselves and make their escape at the tangent. Hence, the centre is obliged to dominate and maintain the system, increasing its power and its repressive laws according as the state grows and develops, and especially so if the state becomes imperialistic. Every nation, city or country added to the empire struggles to liberate itself. This demands an increase of governmental pressure, which constantly and inevitably increases the sway of absolutism. In this manner countries become absolute, or, at best, constitutional monarchies, and the republic no longer exists. The people then

begin to feel the weight of the oppression, reaction sets in, and socialism and anarchy supervene, thus repeating the eternal legend of Saturn gnawing at his own vitals.

Let us again refer to the example of the United States of America. The republic governing the virtuous colony of farmers, established by William Penn, on the banks of the Delaware, grew in a manner unparalleled in the history of the world. The powerful centres of Philadelphia, Boston, New York and the Mississippi, were formed, and incorporated by Washington and the other heroes of American independence, into one organism, under the very best form of government. We say, the best form, because it is a replica of the laws of universal gravitation. After independence had been achieved and the War of Secession fought, the United States enjoyed tranquillity upon its frontiers, its strength increasing through the emigration that poured into them from Europe. But Europe, again, sought to gain a new foothold in America, and entered Mexico for that purpose. The United States protected the American continent, conscious of the fact that the Monroe Doctrine protected the United States at the same time. Since then the force of expansion has become visible. This might be called centrifugal force. This force has increased its strength by the extension of commerce and navigation, and also because of the necessity for rendering protection to the American citizen wherever he might be, and, furthermore, on account of the complete transformation of the country in its relations with the other countries of the world. The nation entered more largely

into the national life and movement of the world, and the sphere of action of the government at Washington, that is to say, the centripetal force, became proportionately greater.

The current of imperialism flowed on irresistibly; a portion of Mexican territory was taken; then the independence of Cuba was protected, and the Philippines were conquered. Thus, the American republic entered Asia. It is now impossible to recede, through lack of desire, in the first place; and, in the second, because there are no human laws that can prevent the omnipotent march of evolution.

Impelled by necessity, the central government seeks larger powers and more repressive laws; the public feels the weight of the new charges; the cost of living has increased; an aristocracy of money has sprung into being, and an aristocracy of money is, generally, precursive of an aristocracy of blood. Furthermore, great commercial and capitalistic combinations are forming, and the nation is losing, almost completely, its tranquillity. Hidden in the shadow, the terrible force of reaction is lurking. Absolutism alone can control the tremendous ferment. From the presidential chair to the throne of an emperor, is now but a step.

The simple laws of universal gravitation, centrifugal and centripetal forces, like the laws of the pendulum, mathematically established by science, govern in the social world. The people are already struggling in the United States with socialism and labor-unions, in order to return to primitive democracy and national welfare.

Lamentations are heard because the happy days

have passed away, when provisions and clothing were cheap and abundant. The nation feels that it is dragged towards the other extreme from that of its primitive happiness, and it is struggling to return to a condition of equilibrium, like the ball of a pendulum.

Anarchism also shows its blood-shot eye, and defies crime, as if crime could ever accomplish anything in this world.

Simultaneously, the central power at Washington, like the hand of the individual swinging a weight around him, feels the force seeking to escape at the tangent. The government tightens its grip, and asks Congress for more force, more law, fatuously believing that such is the remedy and the proper way to preserve the balance. The balance will certainly be thus maintained for a time, only to be followed by a terrible disaster such as happened in France in 1789.

The entire science of Mechanics is applicable to society. There is a social mechanics. Action and reaction; the deformation of the masses in the shock; the addition or subtraction of forces, the inclined plane, the lever, the balance, the laws of initial and uniformly accelerated motion, and the laws of inertia, all, in a word, operate in social movement.

As stated above, there is a social Mechanics. There are ideas, sentiments, waves, currents and forces which are concordant or discordant. Those of like nature, origin and direction unite for defense or attack, sometimes deliberately, but more frequently unconsciously. Ether, the same imponderable force that binds and impels other beings and things of the universe, impels and

combines the social forces, as if the component atoms of the individual mind had an electric or magnetic current capable of increase or diminution. A common spiritual predisposition exists in social organisms, developed and educated under the same conditions, ideas, habits and customs, as in electricities of identical undulations.

For this reason conflicts between individuals of like tendencies are seldom of long duration. They oppose one another in partial conflict, but unite to defeat bodies that are wholly antagonistic.

Social force is, like mechanical force, susceptible of a certain resistance. It has its point of application, its direction, the mass and the potential. If the force applied be insufficient, it is overcome by the resistance. If it be sufficiently powerful, there is a resultant which will coincide with the laws of mechanics.

This is the whole history of the social world. Centres, tendencies, and social forces are formed. These struggle, harmonize, cluster into bodies and groups, place themselves in juxtaposition, and unite or separate. Spiritual and physical force is identical. There is a movement of the human spirit tending towards and making for stable equilibrium and evolution in the social world, the objective of which must ultimately be universal peace.



CHAPTER XIII.

SOCIAL MAGNETISM AND SUGGESTION.

THERE is capacity for movement and work, or, in other words, living force, in the human spirit, and it is, therefore, susceptible of returning to ether, and manifesting itself in the form of light, electricity and magnetism.

Let us appeal to certain facts which are of inestimable value for imparting a knowledge of truth and of the origin of the human soul, whether individual or collective.

We are all more or less familiar with the impression made by music upon the organism of man and upon his spirit. The special rhythm of the musical piece will have a great bearing upon that influence. Sweet and tranquil harmony produces a certain sense of well-being; the nicely graduated measure inspires one with the desire to dance; sonorous or dashing music profoundly moves the spirit and arouses warlike and heroic impulses.

The music has hardly begun when the attentive listener feels a mysterious current in his interior. It seems as though the cells of his body had begun to vibrate, in unison with the chords of the violin, or like the agitated air in the tubes of the instruments. The vibrations having reached the ear, and thence passed to the brain and heart, they invade the blood, and the organs of the body then feel their influence. According to the scale of the vibrations and to the expansion or

compression produced in the heart, man experiences a sense of joy or a feeling of sadness.

All this, of course, is relative, as human beings can acquire a second nature by force of habit. There are some men who are always saddened by music. The vicissitudes and misfortunes of life, or pain and suffering, may change a man to such an extent, that mirth might be foreign to him, and his spirit might always tend toward sorrow. This is, however, an exceptional condition. Among a hundred attendants at a ball there may be, for instance, one sadly impressed by the music.

Even this exception is subject to the rhythm of the orchestra. A current, not only physical, but spiritual, is borne into the organism, and we are affected by the musical waves according to the length of the wave-sound.

How can this be explained? The human body palpitates under the influence of the musical waves, which, like air or ethereal waves, set into motion the same imponderable matter which fills all of the pores, molecular interstices and chords and vessels of the human body. There is undoubtedly an internal movement which develops psychic states, sentiments and impulses. Man sings, laughs, dances, shouts for the fray, because he is expansive and, oftentimes, a dreamer.

The body is, therefore, susceptible of conversion into a species of musical instrument or sounding-board, capable of reproducing in the form of motion, song, joy or sorrow, the musical waves that emanate from acoustic instruments.

An identical impression is produced in us by light. It enters the eyes, and its waves penetrate

the entire system, the atoms undergoing a sort of polarization which develops and stimulates the introspective vision and intelligence.

Ideas expressed in our hearing, or which we read, seem likewise to have an analogous effect, called the power of suggestion, acting upon other minds by the law of concordance. In support of this proposition, let us cite the following authentic facts.

Two ladies, friends, residing in different towns of Central America, situated about 60 miles apart, agreed that if either should die, the spirit of the first to die would visit the house in which the other lived, and say "Farewell."

After the lapse of some time, one of the ladies awoke from sleep one night, at a certain hour, quite frightened, and called to her husband, saying: "I have heard a voice passing through the house, saying 'Farewell.' Can it be that my friend has died?" The husband tried to quiet her, and the lady suppressed the presentiment; but, several days afterwards, she received notice that her friend had died the very day and hour at which she heard the word "Farewell" uttered so mysteriously in space.

Those who still believe in the existence of the spirit after death, would explain this fact by saying that the soul, upon leaving the body, remembered the agreement, and fulfilled it. Others confine themselves to a flat rejection of the facts.

Science, however, is beginning to afford an explanation. In her dying moments, the lady thought intensely of her friend, and remembered her agreement. She thought of that eternal "Farewell." The brain-cells were affected, and

they vibrated; the vibration passed through the cranium, affecting the exterior air, and it then traversed space like the wave in wireless telegraphy.

In a Central American capital, among the students in a certain college, there was a girl of tender years. One day the girl referred to, screaming and sobbing, told how she had seen a vision of her father, murdered and weltering in his blood. Shortly afterwards the telegraph transmitted news of that man's death, with details of date and hour corresponding exactly with those of the event mentioned as occurring in the college. The man had been murdered in a city about sixty miles away.

Science is also beginning to offer an explanation of these facts. The father thought with such intensity upon his daughter in the moment he was struck down, that the thought-waves passed through the cranium and carried the sad message through the air to the unfortunate orphan. It was a phenomenon of photo-telegraphy.

In another Central American city, an excited crowd ran, one day, towards one of the districts, directed thither by a sinister rumor. A young man, deeply in love, sought the woman of his affections. She disdained his advances, and he asked her, once for all, whether she would hearken to his passion. The young woman refused. He insisted, begged and threatened. In desperation, the lover drew his revolver, shot the girl dead, and then killed himself.

Two or three hours afterwards, the people were still more excited. Another occurrence, exactly similar, had taken place. Another youth,

who was absent from the city at the time of the first catastrophe, on reaching the home of his parents, learned what had happened. Impelled by a like passion, which was also rejected, he sought out the girl, and repeated the tragedy.

It is clear that suggestion operated in this case and that there was a concordance of ideas between these two young men, whose minds were troubled by similar evils, and piqued by the same sort of disdain.

A similar phenomenon may be observed in certain persons addicted to the reading of novels. If they happen to be in the same state of mind as that presented by the hero or heroine in the romance, and if they have the same sort of temperament, they murder or commit suicide like the character in the novel. Frequently one suicide is followed by several others, and there is a sort of epidemic of murder or suicide, as the case may be. This is the result of suggestion. Literary schools, the war-spirit—in fact, all human passions—are subject to these surprising influences.

Something evidently exists in the interior of man, which responds to external influences; some imponderable material which communicates impressions, thoughts, and even forms the will itself. These phenomena are innumerable, and are of daily occurrence.

Some men exercise a truly magnetic influence upon certain others. They concentrate their thoughts upon them; they fix their gaze rigidly upon the person they desire to hypnotize; they transfer their thought, and frequently their will, to the hypnotized subject, who answers, or does

as directed, in accordance with the desire of the magnetizer.

This property of the human organism is susceptible of exercise and development, and it is observable with greater frequency among members of the oldest races, such as those of India, the descendants of our progenitors, the Aryans. It seems to proceed from a certain exquisite development of sensibility. The nerves of a subject fit for hypnotization are set in agitation by the first touch of impressions. Like an electric sounding-board, they receive the waves or pulsations emanating from the operator.

In view of the laws of evolution, we cannot marvel at the fact that there is a difference of capacity among the races of mankind. The marked difference existing, for example, in the artistic capacity of the Latin and the Saxon races, is due solely to the fact that the civilization of the former is the older of the two. Continual exercise develops the sensitive and aesthetic qualities; and, as all of the cells composing the human body struggle to create, whether in the physical or moral world, these qualities pass by inheritance from one generation to another. In this manner, a family, tribe or race acquires characteristic aptitudes, a certain special genius, depending upon environment and the educating qualities of the ancestors.

Greece, for example, had no rival in the domain of art, nor had it any spiritual descendant. Neither had Italy. We must not, however, fall into the error of supposing that work and exercise alone are responsible for the exquisite development of the aptitudes. The awakening of

the human soul has been vastly influenced by beings and things, horizons, beautiful landscapes, the character of the light that comes to us from the sun, and the clearness or obscurity of the atmosphere in which we dwell. Few regions of the planet could rival Greece and Italy in the wondrous aesthetic concordance of their elements. France and Spain are the next best-favored countries in this respect, and these two nations have likewise been eminent in art.

On the other hand, the Saxon race, more recently illuminated by civilization, is now beginning to show some capacity for this manner of intellectual development.

It, therefore, appears that the human body is an apparatus that produces physical forces; being a receiver and conductor of them at one and the same time. The movement of its particles, nerves and atoms produces spirit, the twin-sister of light in all its manifestations.

Do the cerebrum and organism of man constitute a living apparatus similar to that of wireless telegraphy, and marvellously adapted for the exercise and development of physical forces, for the transmission of thought, and even of images, to a distance?

The author of this work can cite his own personal experience. He was one time writing of his parents, and the memory of those beloved beings who are no longer living, slowly bore to his heart the most profound impressions. These impressions immediately took possession of his mind, and reproduced the very living forms of his parents with marvellous exactitude. The writer lifted his hand to his forehead, as if to

control the mind, and cause the hallucination to disappear. Memory called with such intensity that the adored shades returned to earth in response to the call of their child. The phenomenon seemed absolutely real, and yet it was merely a creation of the cerebrum, of the atoms of the mind, agitated and illuminated by memory.

In order that we may better understand the comparison to wireless telegraphy, let us examine the principal features of this discovery.

"In 1888, Hertz, the physicist, discovered that oscillating electric discharges generate in ether a series of undulations analogous to those produced by the fall of a body in water. He showed that these waves propagate themselves, refract and polarize, like light, circulating with the same velocity and differing only in dimension. The smallest electric waves are five millimeters long, while the greatest luminous waves have a length of fifty microns (the micron is the millionth part of a meter). The latter are, therefore, 100 times shorter than the former."—LE BON, *Evolution des Forces*.

"The electric waves produce inductive currents in the conductors they meet with. By the sparks engendered by these currents, Hertz obtained the waves which to-day bear his name. Wireless telegraphy is founded upon the propagation of these waves in space. In order to discover their presence in the distance, it is necessary to find agents analogous to the air as a medium for sound, or photographic plates for light."—LE BON.

Hertz, with two Rumkorff bobbins, created two exceedingly rapid electric discharges, analogous to undulations of light. Each bobbin communi-

cated with a small bar, terminating in a small sphere. Then the two apparatus were brought sufficiently close together, the two small spheres being placed directly opposite each other, and a very brilliant spark leapt forth which produced a dry noise. That brilliant spark consisted of innumerable smaller sparks, whose points of contact were not perceptible by the human eye. Hertz perceived them by means of a revolving mirror.

Electric waves created by that rapid succession of sparks, propagate themselves by concentric spheres. The waves then assume a spheroidal form, and attain the same velocity of speed as light; that is to say, three hundred thousand kilometers per second.

When a Hertz Oscillator is set in motion in a closed room, for example, and two metallic objects, such as two keys or two coins, are placed close together in another room adjoining, sparks will be seen to fly between the said objects. It therefore appears that the waves from the oscillator pass through the wall, through interstices invisible to the eye. Subsequent experiments demonstrated that the waves penetrated hermetically sealed metallic boxes.

Does not this phenomenon present a wonderful analogy to the transmission of thought and suggestion, and to all the psychic phenomena which we have examined?

The similarity is singular, and it shows that the cerebrum is an oscillator like that of Hertz, and that the cerebral atoms have an extremely sensitive oscillatory movement, capable of extraordinary propagation, greater, perhaps, than that of light or electricity. As it is living matter, its

work is incessant, and it requires only the stimulus of vision, ideas or of other physical or spiritual agents. It is well known that the living material of higher organized bodies is endowed with double properties.

The human cerebrum takes advantage of the electricity, light and magnetism, latent in its cells, and of the spiritual movement engendered by impressions of beings and things upon the senses; and it becomes, by exercise, a living, spiritual oscillator, utilizing the ether which circulates through its atoms, which polarizes its atoms, which forms them, and operates under the influence of exterior objects, ideas and memories.

We have many daily experiences which pass unnoticed, but which prove to us that ideas also convert themselves into mechanical states, into purely physical movement. This fact is the cause of the bad habits and vices of mankind. A man leaves his office every day, and, after his day's work is done, he mechanically descends to the street, and takes the road homewards. Without apparent mental effort he takes out his key, and places it in the lock, sometimes even without looking to see what he is doing, and frequently, perhaps, he does this in the dark. At first, thought was bestowed upon these movements, but soon habit predisposes the organs to work mechanically, which they do unconsciously.

Furthermore, the cerebral apparatus is of a superior nature to that of wireless telegraphy. The latter can have no greater power than that which it possesses when it leaves the hands of its maker, while the human body is susceptible of growth, exercise and development, subject, how-

ever, like the physical forces, to the laws of inertia, that is to say they require an impelling force and stimulus. This is the role of education and of parents in the development of the infant intelligence. Without proper stimulation, or through sickness, the intelligence may remain undeveloped, as the Herten waves may be abortive if the oscillator is not in proper condition.

The cerebrum is endowed with all faculties in embryo, and if its qualities, acoustic, electric, magnetic, luminous, calorific and spiritual, be exercised from an early period in life, the greater degree of development and power these faculties will attain.

These properties of the human body clearly explain certain social phenomena. There are waves and currents engendered in the cerebrum, and constant communication can be maintained between them when they are concordant, but if the currents be discordant there will be collision. These waves and currents grow and develop and fill the social medium; more powerful currents are created and, lastly, a general current or tendency for humanity as a collective entity. This latter collective spirit tends toward life and perfection, and assumes concrete form from day to day, according as the distance is shortened between communities. By rapid and constant communication, the spiritual atmosphere of humanity becomes clearer and grows more powerfully conductive of acoustic, electric, luminous, magnetic and spiritual properties.

The magnetic suggestion, or induction, or whatever it be called, passing from one community to another, becomes greater from day to

day, and its phenomena are like those of terrestrial magnetism. Science is demonstrating the great theory of Ampere concerning magnetic currents circulating the globe from east to west. The earth is a great solenoid, and we may observe the singular coincidence that civilizations have been propagated from east to west. Civilizations had their birth in the ancient East, and the greatest and most powerful nations of the earth rose upon the shores of the Atlantic; as if from terrestrial magnetism there was a transition by induction to animal magnetism, and thence to the human spirit; as if the movement of the sun controlled the infinite forces and governed the mutual attraction of beings and things. The terrestrial planet and all that dwells upon it are in constant agitation in the luminous path that shines from east to west, establishing currents of life, moving the ether and illuminating the universal spirit, the apocalyptic God conceived by the ancient East.

Humanity is, also, a great solenoid whose power increases in direct ratio with the facilities for communication of the spiritual currents flowing between individuals, societies and nations. Humanity, like the earth, is constantly forming its poles, and upon the axis thus formed the supreme aspiration towards life and perfection must revolve in the direction of the great current.

All of these phenomena are produced by the omnipotent action of universal gravitation, to which universe, beings and things are all subject.

Science is ever triumphant, and no one can foretell whither it will lead, based upon the simple experiment of Galvani's frog, Newton's apple

and the marvellous conducting powers of the organs of the human body with its immense aptitude for the development of all faculties.

Science will yet demonstrate that the human soul or spirit, and the belief in its existence, did not come into the world by mere superstition or prejudice, or by mental conception or objectivity, but by direct induction. It was felt, not guessed at. It revealed its presence in the manifestations of inner consciousness. Its impulse, work and force were felt.

For this reason, man believes in its existence. Its nature was unknown; it seemed immortal and distinct from the body. It exists in the cells, in the atoms of the organism, like electricity in the wire or light in space, and is in agitation when the mind is at work. It is living force and has its work to accomplish. It lives, grows and dies like organized beings when the atoms composing it are destitute of life.

Man, however, is in error in believing that the soul survives the body. The soul is but a portion of the universal spirit and becomes reabsorbed in the Infinite, Grand Total, or Holy Spirit, as ether or imponderable matter.

These same truths also clearly reveal the reason and living strength of religions. Religions are inevitable. They are the recognition of that mysterious force or vital, universal fluid, ethereal and omnipotent.

There is a supreme power; an eternal life which is variable in its manifestations but single in essence.



CHAPTER XIV.

SOCIAL GRAVITATION.

IF the social world be governed entirely by the laws of mechanics, and if there be forces of attraction and repulsion, that is to say concordant and discordant currents, communities and states must tend to organize themselves in a manner similar to that presented by the universe in space, that is, in confederations.

These immense sidereal bodies, apparently omnipotent, have traveled and will travel eternally in invariable orbits, in obedience to the supreme law of universal gravitation. There is a force impelling them towards the tangent and another force attracting them towards the centre: centrifugal and centripetal force respectively.

The equilibrium of the heavenly bodies was established by creation itself, chaining and subjecting them to inevitable and unvarying laws and forces. The orbits of space were grouped by systems, each having a central sun. Our planetary system has its sun which gives us life, and maintains our energies by sending us its very spirit. It guides our steps and sets the various physical forces of ponderable and imponderable matter into motion. For us, the sun is the great Energy; the great All.

The sidereal universe was not liberated from the inviolable law of universal gravitation. Although apparently unconscious, these bodies do not exist in a state of anarchy. There was dis-

order in chaos when universal matter was in agitation and suffering constant clashings. Existence in such a state of disorder was impossible. The universe and its parts, impelled by supreme necessity, organized themselves into groups and systems, and harmony appeared in the vault of heaven. Universal motion was the essence of celestial mechanics.

Passing from the stars and planets, from the infinitely large to the infinitely small, the laws of gravitation prevail with equal force. Taking the cell as the starting point of organic matter, we are taught that by virtue of the needs of existence, and through purely instinctive sensations and concord, cells bunched themselves together, forming nuclei, and fitted themselves to perform a function. One nucleus thus formed, attracted, created or formed a new nucleus, whenever necessity required a new organ for the conservation of life. Necessity arose, and the nascent body recognized it. All the cells constituting the entire organism set themselves to work for the creation of a new organ. There was an unending course of adaptation to the continuous necessities of existence.

Such is the synthesis of the origin of organized beings. Life grew in them, assuming different forms by adaptation, undergoing constant development and striving to reach perfection. Impelled by a mysterious force, all beings desire to live, to survive. This universal aspiration for life was the origin of the millions of beings, and of the millions of forms which those beings and things have assumed. The origin of intelligence is found in the same mysterious force.

One would be tempted to say that these cells deliberately thought out the plan of their organization. They felt only the necessity for juxtaposition in combination with concordant cells, in order to create new cells having similar tendencies. By virtue of vital impulses, they grouped themselves so as to assist in the work of conserving life. Hence, we are unable to mark the boundary between intelligence and instinct. Intelligence is simply a manifestation or development of instinct, susceptible of progress towards creation, like all other qualities or functions, according to the necessities of the creature and the functions imposed upon it by nature.

The primitive cell had its centre, the original directing and attracting nucleus, around and about which the new cells assembled and clustered. This central cell directed and impelled the others. In the delicate edge of the new cell a force resided tending to drive it away from the nucleus; but this force in its turn would attract other cells. There was sufficient strength, however, in the mother cell to restrain it until the organ became solidified and assumed its true form.

Passing to beings of a higher organization, the observer will find the same forces at work. In man, for example, there is a vital centre which maintains, repairs and links together the organs of the body and endows them with the power of movement. From the moment of conception, from the formation of the first cell of the foetus, this vital centre attracts and organizes the other organs in such a manner that at birth man is ready to begin the discharge of his functions.

There can be no closer resemblance to the be-

ginning of the first organized cell, the first living matter that appeared upon the earth, the protoplasm. Solidification of the organism proceeds slowly, in preparation for exterior life. The creature is born, and the individual necessities of existence begin to exercise their influence. The human organism is thus converted into a society of cells, vessels, viscera, bones and organs, forming a combination of vital elements which associate and act in concert, distributing among themselves the various vital functions. Each nucleus has its own business to attend to.

If many proofs were not existent demonstrating these truths, it would be sufficient to mention the truly magnetic fruition experienced by man through sentiments of love. It would seem as if universal creation took part in the sentiment, and as if all of the cells of the human body radiated life. The simple kiss of the amorous couple fills their hearts with a gentle warmth, the entire organism quivering, like Galvani's frog beneath the influence of the electric current. Hence the great power of physical inheritance; hence, also, intellectual inheritance, since for spiritual work the cells are agitated, exercised and habituated to a certain manner of existence.

We can declare that there is no physiological or psychological phenomenon which cannot be fully explained by the laws and truths which we are studying. The smith who has lifted the hammer and smitten the red hot iron during many years, and at the same time has exercised his mind in seeking the best methods to forge it; the musician who has for a long period used his ears and nerves, which we might call the

chords of his body, in appreciating the notes and their different shades, will both, probably, leave those qualities as an inheritance to their offspring. But we must not confound capacity with will power. The child may inherit the quality, but if the father or master does not direct it in a proper channel, the quality will be lost. If the father neglect it, or awaken other aspirations in the child, the inherited capacity results in nought.

It might be objected that great men hardly ever have sons endowed with powerful intellect, and we might refute the objection by the above argument. Continuous exercise of the cerebral material develops intelligence. If the child does not exercise its mind, the intelligence will not be developed, no matter how large may be the cerebral mass. In order to arrive at a high state of intellectual development, it is necessary to cultivate the art of thinking, to look into and examine all things, to interrogate everything and to desire knowledge with unflagging will. It is very difficult to form men of that kind and to educate them, especially if the mother be destitute of ambition, and incapable of awakening in due time the tender mind of the child. If we take up a list of celebrated men and learn something of their lives, we will find remarkable proof that they all began the work of thinking in childhood, under the guidance of exceptional masters or mothers.

On the other hand, the same laws prove that intellectual development takes place at the expense of physiological life, and this for the reason that intellectual development depends upon an effort of physical material. There is waste,

and the mental power may be sterile or weak, or there may be carelessness in the education of the children, and consequently the inheritance fails.

There is, therefore, in man and other organized beings, forces tending to integration, and centres that regulate the movement. There are also centrifugal forces tending towards escape from the influence of the centre and forces of attraction and gravitation which make for the conservation of the balance and the intimate union of all of the organs. In the foetus, in the egg, in the origin of every being, the expansive force is evident, but once the creature is born and the organ solidified, the centripetal force exercises greater influence and gains in power, degree and tendencies. It has grown and conquered and adapted itself to the centre, to the attraction and direction which the centre impresses upon the other organs.

Combat also supervenes. Some organs tend toward waste and others to the repair of the waste. Some furnish food which others consume. The body lives, moves and thinks by virtue of that singular arrangement and equilibrium. In the developing and growing creature, it is impossible to say at what instant instinct is converted into intelligence, material life into spiritual life, or impulse into will. The will, undoubtedly, is the offspring of impulse, and it finds strength in the habit of doing certain things and of liking certain things from an early period of life. The transition presents no lacunæ or voids that are appreciable to the observer. We cannot see or feel the point at which light becomes heat, and

we do not know at what moment life gives birth to intelligence. All living beings are organized in this way. Wherever a union takes place a nucleus is formed which tends to the performance of a certain function. The different nuclei group themselves about a centre, and create forces and partial tendencies the result of which is a distinct object, namely, life and movement for the entire being. When this tendency, or final result, assumes definite form and alignment, it may be said that the organism is complete and that it will perform its functions.

The laws governing this association of cells, organs, vessels and motor-centres of the living being also govern the social organism. Society is an organism, having its origin in a primitive nucleus or initial social cell, around which other centres or cells group themselves. According as the organism grows there is integration, and subsequently disintegration. (These two words "to integrate" and "to disintegrate" seem to be confused in the language of sociology.)

The first nucleus is a human couple, uniting to aid one another in the struggle for existence, to defend themselves or to attack adverse nuclei. Children grow up around that couple, and the family has taken form. Presently one of the children is impelled by a physiological law to form another nucleus, thus disintegrating the first family, but laying the foundation for the tribe. The tribe, in its turn, maintains the tribal relation through the aspiration for existence, and in order to struggle against hostile tribes. Then the chief appears spontaneously and necessarily upon the scene. There are, therefore, forces

which propend to escape at the tangent, and a centripetal governing force which maintains the balance and imposes laws which are, at first, rules of conduct that promote existence, but which afterwards rise to the dignity of written or verbal law. That small social world must have its centre, the government, around which the social organism revolves. It is a copy of the planetary system and a corollary of the supreme laws of universal gravitation, or rather gravitation itself. The degree of cohesion is found to be in direct ratio to the mass and in inverse ratio to the square of the distance.

The larger masses attract the lesser bodies, the force of attraction being less according as the distance increases between the bodies.

New families, having developed, disintegrate in time and form villages having a common character and common interests, which finally becomes a part of the state and subject to the state government. The state has also resulted from the necessities of existence. The new nuclei, whether towns or cities, obedient to the law of gravitation, perhaps unconsciously, revolve around the new government. Thus the great tree continues its process of branching, until the day arrives when by reason of the indefinite reach of its radius of action, that is to say, by what might be termed centralized imperialism, the most distant communities, in accordance with the principles already stated, fail to feel the influence of the attraction. The distance from the seat of government to the frontier becomes so great that the central power becomes a nullity as respects the most distant possessions; and these feel an inspiration or need for separate and in-

dependent existence. In order to make the image clearer, let us consider the great disorder that would ensue in space, among the stars and planets, if our sun should attempt to conquer for our planetary system one of the stars of the constellation of Centaur.

Nations devoted to conquest live in disorder, and inevitably perish by reason thereof.

If the new families establish themselves near the primitive nucleus, the families nearest will feel most the attraction of the primitive couple, and the farthest away will feel that attraction the least. If a family move away and establish itself in some other locality, the bond weakens, or even breaks and sometimes is transformed into repulsion or hostility, the reason being that mutual necessities and the need of assistance no longer existing, the different nuclei tend toward life and progress on their own separate account.

Such is the organization of the social world and by virtue of these great laws empires in whose dominions the sun never sets have been unable to endure. Nor is there any imperialistic nation which is not travelling towards its doom according as it seeks to extend its sphere of action beyond the limits of its central influence.

By reason of the same supreme law, federal government is alone possible upon earth. The federal government must be established in accordance with the laws discovered by Newton and those governing the propagation of light, electricity and magnetism. Humanity requires conductors and transparent bodies so that ideas may blend and increase and make progress towards perfection and universal peace. Such is the dream of philosophers. Man himself en-

larges the sphere of governmental action by artificial means, such as the increase and rapidity of communication, the press and the telegraph. The more bridges and roads, railways and steamships are built and employed, which tend to produce concord between the social currents, the greater will be the possibility of ultimately forming one great social organism.

As was said in the preceding chapter, a general tendency is gradually assuming form, and this great human idea shall guide the nations towards a supreme object. In the same manner that the human soul was formed, the soul of humanity is now forming with clear and well-defined characteristics and tendencies.

The radius of action of a government, or, rather, the radiation and diffusion of the human spirit, is facilitated in level places, where intercommunication of spiritual waves and of individual and social forces is unobstructed. This radius of action is, on the other hand, impeded in mountainous, cloudy and dark countries charged with aqueous vapors. These latter elements are inimical to cohesion, because they neutralize and absorb the spiritual currents of the people.

These great truths afford ample scope for the operations of statesmen. Let those of them who love their country and desire to govern well, and who aim at union and universal peace, open ways of communication for the people of their states. If they do not overcome the mountain, the mountain will overcome them.

It can, therefore, be clearly understood why we have stated that the social world is regulated in complete conformity with the laws of uni-

versal gravitation. The planets, themselves, require clear, unobstructed space for their evolutions.

There are forces, partial currents, which are converging for the formation of a grand current of humanity. In the course of ages, the languages, states, consciences and ideals of the nations will amalgamate. Men and nations will learn to understand each other more readily, and spiritual life will gain in intensity, light, heat, electricity and magnetism. The separate solenoids will form one grand solenoid which shall be the guide and light of all human aspirations.

As the sun with its starry train, guided by the combined forces and currents of the universe; moves towards the great constellation of Hercules, humanity with its train of communities and nations is marching towards a grand ideal, namely, a universal soul, a current formed and composed of all the single, separate streams of humanity. The things and beings upon the streams are perpetually changing and undergoing renewal, but there is always one light, one single, supreme and universal aspiration which guides and maintains us, a grand hope, a sublime and pure religion which shall ultimately unite all hearts and spirits in bonds of human fraternity.

But notwithstanding all this, absolute liberty never can exist. Even in chaos, worlds and nebulous masses, cataclysms and sidereal fires were subject to the physical laws, to the operation of component and resultant forces, to the laws of universal mechanics which control and direct all things and their courses, whether same be universes or suns, stars or constellations, and whether infinitely large or infinitely small.

Science has given a name to that imponderable material which is susceptible of transformation into ponderable matter and of becoming the conducting agent of all forces, which combine, change and transform themselves in endless variety. That agent is called ether, and it exists in all the interstices and pores of infinity, in the centre and at the periphery. It forms Infinity itself, and space, and created and uncreated things. It is the spirit and organized life. It dwells in the stone and in the diamond; in liquids, gas and in the human retina. It penetrates, animates, creates all things, moulding their bodies and spirits in material and immaterial forms. It flows, vibrates, circles and expands throughout the entire reaches of Creation.

It engenders light, magnetism, spirit; it varies infinitely the manifestations of nature in conformity with the force of its waves. It has existed in the most remote ages, in the earliest form of the past; it lives in the present and will exist in the ultimate form of the future. It gives life to the suns and to the beings of the planets, to the first germ and the last, and to all yet to be discovered. It created that beneficent light which has illuminated the paths trodden by humanity from the dawn of society, that light that awoke intelligence with undulations vibrating in the internal organism of man.

If creation be thus conceived we can appreciate the supreme sublimity with which it has been outlined by the powerful Biblical race which directed the first steps of humanity upon the surface of the planet, and conserved and propagated to posterity the first glimmerings of the spiritual world.

CHAPTER XV.

UNIVERSAL RELIGION.

ACCORDING as the human intellect is capable of pursuing investigations of this nature, the mind will grasp the great religious idea of Genesis, that is, the *fiat lux*.

Light has been the divine guide of all beings and all things. It was the great organizer of the stars and of the universe, of the infinitely small and the infinitely large. Ether is the omnipotent medium which, through its own motion and agitation, distributes throughout creation its imperative requirements, that is to say, light, heat, electricity, magnetism, spirit and sound, all condensed in a single word, matter, which proceeds from the ether and returns to the ether, as a material single in essence but multiple in its manifestations.

All these manifestations are subject to one great law of motion, called gravitation. This law was discovered by Newton. It is of universal reach, controlling the physical and moral world and all the transformations of life and nature.

The planets have been organized with deference to this law which governs all things of space as well as all the beings upon the earth.

Individuality has been indefinitely multiplied through the operation of that law of creation and harmony which enters into, and displays its power in all the phenomena of nature, whether in the material or in the spiritual world.

All things tend to communicate it, and to organize it in such a manner that the ethereal forces blend in one great, eternal aspiration. For that reason we have the force which attracts towards the centre and that which tends to escape from it so as to have connection with all worlds, beings and things and yet to exist apart in permanent, universal gravitation.

It decrees that from the infinitely small infusoria up the scale to the perfectly organized animal, from the cell to the man, from the first vegetable nucleus to the largest tree, from the uttermost fragment of an asteroid or a meteor to the largest bodies of space, there is a grand, eternal aspiration, namely, a tendency to maintain existence, to endure and reproduce; and the molecules, whether weighty or imponderable, are so united that no one knows or can know where one begins and the other ends.

This undulating movement operates through infinite degrees, supplying light here, heat there, electricity in one body, magnetism in another, enduing one organism with spirit and another with sound, according to the length of the undulations. Ethereal waves fill the spaces of the universe, extending and refolding upon themselves, vibrating in infinite measures, and as impalpable spirit they penetrate stone, marble, platinum, the diamond and the rock. They are in ceaseless agitation, in the solid and the liquid, in invisible gases, in molten metals and in masses of fire and flame.

This great eternal religion exists, not alone for man, but for all beings and things. Matter and spirit desire to live, to co-exist in creation, be

cause they proceed from the same essence. They are inseparable twin-sisters who have dwelt together in the most profound love since the beginning of organic matter. That religious sentiment of immortality is life itself struggling against destruction and passing from one state to another in order to continue contributing to the progress of the earth and that of the other worlds of the universe.

This struggle, from which humanity suffers, is simply a manifestation of life, an expression of the supreme anxiety for existence. The individual fighting against death is the unit in the great struggle. He desires to perpetuate himself, and it is clear that through the perpetuation of individualities the sum or grand total will be perpetuated.

One social body struggling against another, seeks to live, and is complying with the great principle of the religion. The life of the different bodies produces the total sum of life of humanity. Each of them struggles before they come to understand each other and coalesce. When coalition is effected, harmony is introduced and they proceed together upon the great stream, which we might term the great river of Human Tendency.

In the last analysis, that which exists is perpetual movement, and this is life. Death is nothing but a transformation, in which matter passes from one state to another. Man ceases to move, for example, because his function has ended; but the matter of which his body was composed retains its activity and its power to furnish life to other beings, and give back to Mother Earth

the nourishment with which the earth has fed it in its human form.

This great religion is sublime and divine. It covers the firmament and the stars with the altar erected by man upon earth. As stated in Genesis, that grand force is omnipotence itself, infinite, luminous and eternal. It is the eternity of these things which we see and feel and which lives within us and in the rest of creation.

We shall always bow down before that religious conception of our forefathers, who thought with a clear-sightedness that excites and commands admiration. They attributed to God as the first cause of all things, the power which science has discovered in ether, and they believed that might had given spirit and life to mankind, declaring that the eye of the Infinite, the eye of the Sun from its throne in the heavens watched over and directed the children of the earth.

"Oh, Light Divine, Holy Spirit of God, soul of the universe, heavenly ray, most pure, immaculate breath of the Holy Spirit," were the words uttered in prayer, "Return to us, most Pure Virgin, watch over man, thy child, drive the shades of darkness from his spirit, be the intermediary between man and heaven." The Vedic poems, psalms and canticles are full of such images as these.

We are drawn along by the sun and by other systems existing in the inscrutable depths of space, and we are impelled by a force which imparts heat to our members, life and thought to our minds, desires to our nature, in a word, complete life in its double manifestation of ponderable and imponderable matter.

There is but one destiny, one final object, one great current for all beings and all things. The divine light, which is the spirit, the great essence, the father of solar systems and of the universe is eternally issuing from the labyrinth and guiding creation.

If life is the supreme aim, the aspiration for existence must one day unite human beings. The day must come when distance shall be annihilated, and when the social forces, already commingled, shall produce the great result.

This is the direction in which the world is travelling. Dirigible balloons, wireless telegraphy, the suggestive power of individuals and of communities, increasing as the races advance in age when the nervous system is more predominant, will form of humanity a great confederation, grouped around small centres but having common interests and like aspirations.

It is impossible to indicate the period in which this destiny shall be achieved, for evolution is hardly begun.

Other considerations are, likewise, drawing mankind towards the great religious conception.

The religious sentiment was the first sentiment experienced by man. His existence had hardly begun when he sought protection, a light to illuminate his path. He felt, at first, that something was agitating his being and impelling him onwards. Fear of darkness caused him to fall upon his knees before the light. This is further proof that light and darkness are complementary; that good and evil contribute to make man perfect; that nothing is superfluous, and that everything has its function to the end that the great

mechanism may move onward towards perfection. Humanity, like the spheres, gravitates with complete subjection to the laws of mechanics. It has its power, its currents, its soul, which is but a form of the great spirit or soul of the universe.

Material forces are the beginning and end of spiritual forces. The undulation which produces ponderable matter can also produce imponderable matter.

The human spirit, like matter, was moulded by the hand of light, and light was given that organized beings might live and move.

There was a hearth which formed the first social centre, directed and helped by the rays of the sun. The fire of the hearth was regarded as the Son of God and of man. This gave rise to sentiment and to love and to the desire to associate for combat against wild beasts and the elements. From the very beginning of society, religion and government have existed, and they must continue to exist until the end of time.

The social world is organized like the forces of nature, and like the sidereal worlds, the stars, planets and nebulous bodies. Worlds, suns, systems, struggled with one another, penetrating and commingling: they crashed, flashed and whirled spontaneously in space. A fiery ocean of agitated matter filled the infinite reaches of the universe.

Slowly and gradually organization followed: One mass attracted another; one system directed other systems and the sublime law of universal gravitation was inscribed across the vault of heaven,

The great suns held the centres, and all the systems were endowed with strength to sustain the equilibrium. The centrifugal force which was created at the same time was the bond of union between the various suns.

Thus began the procession of the stars. They had struggled and suffered much through the disorder. They had wept fire, as humanity has wept tears, in the process of organization.

Thousands of systems and federations, including the universal Confederation, were thus organized, and peace reigned in the heavens, the orbs of space having arrived, so to speak, at a full knowledge of their duty.

Humanity is not exempt from the operation of this supreme law. Anarchy is childish and foolish. This law of gravitation is the link that binds all living beings. At times of social chaos tribes and nations clashed with one another. Organization commenced when the light began to illuminate the conscience of man.

Cycle after cycle, and slowly, the formation of centres continued, and these revolved around others more powerful and luminous than themselves. The tables of the law containing immutable social precepts appeared wherever people had to live together. In those remote ages the social world discovered the force or law that impelled it to equilibrium. There were struggles, combat, exhaustion, rest, renewal of strife, all resulting from the supreme aspiration towards existence.

Nations war with each other in order that the social world may attain to a full consciousness and to irrenounceable laws of government, that

is to say, to gravitation, the basis of equilibrium and the law that governs all worlds, beings and things. Confederation of the nations of the earth, like the confederation of the universe, will ultimately reach a state of equilibrium and harmony, not such as is desired by anarchy or sought by absolutism, but harmonious relations that shall be in complete obedience to the law of universal gravitation, which in other words is the law of evolution.

Detached human nuclei formed themselves, like satellites revolving about a centre. These centres, in their turn, rotate about others of similar ideals and tendencies. This is effected by the law of concordance, in proportion as railways and ships and roads afford means of easy communication.

At the same time humanity follows and is guided by the light. In the Bible East are found the splendors which serve as the medium for the illumination of the human spirit. Nothing of the past has been lost and nothing shall be lost of the future. These splendors are composed of the atoms of our life, the waves by which we are impelled and directed. They contain the atoms of the human soul; they were the origin of the social spirit, the agent and messenger of concordance of ideas, and are the spirit of the beings and things that constitute the universe.

They are the marvellous, sublime unity of forces. They prolong their palpitations from infinite positive to infinite negative, vibrating in the molecules of all things. All flow from an infinite being existing in the depths of space and palpitating in organized beings and in the mind;

in the waters of the seas and of the rivers; in the air and in the bosom of the earth; in the light and in eternity. This infinite being dwells in the skies, rides upon the storm and the tempest and burns in the wombs of suns and in the sacred fire adored by man. This omnipotent being resides in all things and is all things, in essence, presence and potency.

This infinite spirit manifests itself in all forms and colors, movements and undulations. It passes from one being to another, pulsating everywhere, in the darkness and in the light, and it forms part of all that has been created and of all that is non-existent. It produces light, heat, electricity, magnetism, intelligence and sound. It animates the body and the soul of man. It is one in essence and manifold in its manifestations.

An undulatory movement exists filling all space. It is the attracting and repelling force of atoms and molecules. It combines them if their vibrations be harmonious and repels them if there be a difference in the length of their undulations.

There are, then, harmonic waves as well as waves of repulsion and dissociation; but in certain conditions of their molecules these are susceptible of concordance and combination. In one state they repel, while in others they attract each other, just as men will sometimes clash, while at other times a bond of sympathy and fraternity seems to unite them, the undulations of their spirits comprehending each other and blending in harmonious union. As lights of identical vibration will blend, so also spirits that have been educated in like tendencies and thoughts will harmonize and blend with one another.

It may, therefore, be declared that science will be the father of fraternity, because science levels the paths and indicates the road to harmony.

We have already said that ethereal waves propagate themselves with greater facility in rarefied air, and that light shines with more intensity through serene and transparent space. The human spirit, likewise, enjoys more illumination in climates whose skies are pure and of radiant clearness. The mind of man is more apt, and will the better understand and love the truth the fewer obscure beliefs may have found lodgment in his spirit.

The ether vibrating in the human body, uniting its molecules and penetrating its vessels, receives more readily impressions from the exterior world, the more healthful the body and the more sensitive the nerves.

Spirits fraternize and commingle by means of education, and concordant ideals and aspirations; and as humanity is actuated by one supreme aspiration which is common to all, relative harmony must come to exist in the social world in the course of time. To facilitate humanity in its effort to reach this stage, it is urgent that unity should be introduced in schools, and that similar principles of education should be generally adopted. The human race is travelling towards that end, which is the foundation of governmental and religious unity. It is the Constellation of Hercules which guides humanity, and is the greatest and highest of social problems. This problem can be solved through universal gravitation and by conforming to the supreme laws governing equilibrium.

The soul of man, that imponderable material, that essence of matter, formed by light and impressions derived from the exterior world which were felt instinctively by our ancestral progenitors is, as we have already stated, simply a fraction of the social soul, a form of the soul of humanity, a vibration of the ether which agitates the stars, a divine breath, as stated in the Scriptures. It is a flash of the universal illumination.

There is nothing more wonderful than the minds of those ancient geniuses of India whose thoughts formed the basis of great civilizations that preceded our own. That *fiat lux* is the true and divine poem of Creation. Nothing more august and sublime has ever been conceived, or can be conceived on this planet.

At the end of thousands of years, humanity turns its eyes towards the Bible East, dazzled by the Apocalyptic God, the Creator and Ordainer of all things, infinitely wise and omnipotent, infinitely just and merciful, the God who sees and feels all things, scrutinizes all things, and who transfigures and illumines all things in body, spirit and truth.

Science has, at last, caught a glimpse of the God of the Bible, with His eternal attributes. It adores the light that comes to us from the heavens and palpitates in all things, the great Holy Spirit.

The two Gods have been shown to be but one and the same God. The God of the Christians, One and Pure, the Creator and Infinite, the eternal Breath of all things material and immaterial, Who has no kingdom because he dwells everywhere, nor form because He fills space in its

infinity, illuminating science and humanity. This is the same God as the God of the East worshipped by our progenitors. He is the Dawn, the Light that awakened society, the mysterious force which gave us life and spirit, palpitating in the depths of our being and vibrating within us and in all the confines of creation and throughout the infinity of space, in the minutest cell and in the most majestic bodies that float with us through the heavens.

CONCLUSION.

I.

THE state, therefore, should seek equilibrium in the law of gravitation, strengthening the central power to the point and limit necessary to secure the happiness of the majority, and never permit itself to be influenced by the interest of groups or factions. Government is the institution of all, and as the needs of all are not alike, the interest of the greatest number only should prevail.

This demonstrates very clearly that the representative, or republican form of government is the best one, provided the president of the republic, or in other words the executive power, is invested with sufficient force to restrain within proper limits the expansive impetus of individuals and communities.

When the state springs into existence, as if it were an animated organism or a body endowed with a sense becoming susceptible of expansion and enjoying commercial benefits through its relations with other governments and countries, the law of **nations** must be defined. Hence we have an internal, or domestic law, and a code which might be termed external. One of these is the centripetal force tending to maintain and direct the organism; the other represents the centrifugal force which regulates the equilibrium and the relations among the various countries.

The former is what is known as private law,

and the latter international law, which is not yet well understood by the world at large.

These simple and evident reasons show that the so-called principle of non-intervention in the internal affairs of other states, has been and always will be an utopian idea, just as, to a certain extent, it is impossible for one household not to have any relations or influence with its neighbor with respect to moral conduct or the repression of crime.

Consequently civilized powers have a perfect right to intervene for the improvement of less civilized states; but this, of course, must be done in accordance with the immutable principles of justice for the benefit of mankind and not with the object of conquest or of political domination. Powerful governments can, and it is their duty to prevent the useless shedding of human blood, by requiring disputes to be settled by recourse to courts of arbitration.

Communities and humanity in general aspire toward perfection and peace. The congress of nations has, therefore, the right to repress, subdue, and, if need be, chastise those who attempt to disturb the peace of the human family.

II.

Reverting to the comparison which we have made with the planetary system, it is easy to show that the relations between states increase in proportion to the facilities afforded for intercommunication, as the relations of the planets are maintained through the easy interchange of ethereal waves and through the force of solar

attraction. All movement is easy in space by reason of the diaphanous character of the atmosphere and the conductivity of the moving bodies.

From this we are led to assume that when the nations of each continent associate themselves together to form courts of arbitration capable of serving as a guide, or axis, in the relations of all, and when, in their turn, such continental courts are directed, as to the relations of continent with continent, by another court which might be called intercontinental, universal peace will be more practicable, and the nations of the earth will come to understand each other better.

Humanity is slowly approaching this desideratum, through scientific achievement, such as the telegraph, aerial navigation, the submarine cable, the telephone and many other inventions which are converting the conductivity of social bodies into a tangible fact and creating concordance in ideas, sentiments and aspirations. All this tends to favor the governmental sphere of action, and the discovery of truth, which is the sole source of union and spirituality among beings and things.

The social organism is creating its nerves, its antennæ, its universal soul, as man in the course of evolution created his corporal nervous system, charged with the duty of conducting to his heart impressions and relations of the external world. Railways, air-ships, telegraph lines are the nerves of humanity. As these are becoming more and more the agents of peace upon the earth, governments should acquire them as national property, so as to employ them, not as objects of commerce, as do the operating companies, but as

nerves and arteries of society. Cheapness in the cost of locomotion, telegrams and books will contribute with great strength to universal peace and fraternity.

Universal gravitation, in a sublime and wonderful manner, opens the way for us and indicates the path.

III.

To judge from its harmony with the laws of gravitation, it appears that popular representative government is the best form of government. Historians and lawyers have investigated the origin of the legislation of the United States, anxiously bent upon finding therein the trace of the English character and of English institutions.

Undoubtedly, the ideas which the first colonists brought with them aboard the *Mayflower*, and afterwards with William Penn and other eminent colonizers, had a certain influence in the remarkable political development of the United States of America; but it must be remembered that it is not enough to conceive ideas and to love and profess them affectionately to secure their realization.

If nature and the struggle for existence, that is to say, the medium in which the social community is developed, do not aid man in the work of putting his beloved ideals into practice, the institutions are abortive and the most beautiful theories fall into discredit and oblivion. Witness the failure of the French Revolution in the establishment of the Republic.

The United States of America are not indebted

to any nation save themselves. Their peculiar genius, or national soul, is the product of all the forces which impelled and stimulated the earliest colonists in the struggle for existence, for it is the fact that communities, like individuals, develop genius when they exercise from the period of infancy their intelligence, will and entire soul.

The evolution of the United States has been in harmony with the geographical conditions of the country and with the character of the struggles to which the colonies were subjected on account of being left to themselves by the mother country, which was engaged in wars in the Old World.

In the United States of America, as in ancient Rome, necessities first existed, and laws afterwards. For this reason the founders of the United States sought out for themselves the best system of government.

The thirteen original colonies of this powerful nation were establishing themselves upon the shores of the sea and on the banks of mighty rivers. England could not give them anything. Fighting against the French and the Indians, the necessity for federation and union for the common defence was constantly appreciated. This was the true foundation of their character and education.

This supreme necessity of existence, the divine instinct of self-preservation caused the establishment in Virginia in 1619 of the first Representative Assembly, known as the House of Burgesses. The planters and cultivators of the soil had felt the need of organization for the defence of their private interests.

But this was not sufficient. The struggle also

required an alliance of the colonies, and in 1643 the first intercolonial league was formed and composed of Massachusetts, Plymouth, New Haven and Connecticut, for mutual union and strength against the attacks of the French, Dutch and Indians, as England was unable to defend her colonies.

Beginning in this manner, agreements for organization were logical, and the birth of republican equality was entirely natural, for if men and towns were mutually necessary, they must, of course, enjoy the same rights and privileges.

An historian writes that the colonies were growing in power, mutual relations and self-confidence. The phenomenon is similar to that presented by a man brought to perfection through his own strength, his own muscles and his own brains. Such is the pedestal of genius.

The navigable rivers were extremely favorable to the development of these relations.

As the struggle between the French and the North American colonists continued, the first Colonial Congress was organized at Albany in 1675. Thus the form of the government of the future republic was outlined and founded, the colonists jealously claiming the utmost equality of rights. This equality was a prerogative which was felt and cherished. Even the small colonies demanded equality from the large ones. At the time of Independence equality was in full vigor, a condition which that principle still presents.

The struggle with the French having come to a close, war with England followed on account of the imposition of the Stamp Tax and other charges and extortions, the colonies continuing

to act in concert for the common cause and by reason of identical necessities. It was then that the first Continental Congress met in Philadelphia. Franklin and Washington were living at that time, and the seeds of independence were fructifying in a clear atmosphere of virtue and patriotism.

Judged by the laws and truths which we have been studying, the colonies were capable of greatness through their own efforts. The air they breathed in those days was singularly suggestive and educative. Patriotism overcame all obstacles and it established rights which the American colonies had earned by the sweat of their brow in the struggle for existence. That struggle involved more than two centuries of laborious toil.

When Independence was achieved, George Washington laid the foundation of the Federation, but not without bitter trials and vicissitudes, as the colonies did not wish to surrender any portion of their rights to the Central government. The force of expansion and resistance to new forces produced reaction in the States. Printing, however, existed, and Hamilton was alive to defend the work so expensively crowned by the result. The spiritual bonds had their organ, *The Federalist*, and means of communication existed in ships and navigable rivers.

The first Congress of the Republic which was elected, by the propensity of the colonies to escape at the tangent, to liberate themselves from central control, as happens with all things and bodies in movement, gave more strength to the central government and the laws of gravitation

enjoyed complete triumph, as they had triumphed in chaos despite storms and cataclysms, reverses and pain. The United States learned from experience and afterwards framed its laws. This is the true basis of wisdom.

A strong central government, like the sun in the solar system, was thereupon established, with the States, like planets, revolving around that centre.

To render the similitude more striking, James Monroe in 1823 declared the necessity of maintaining the American continent as inviolable against European aggression, and enunciated to Congress his memorable Doctrine, which constitutes the veritable charter of a continent. This doctrine, it would seem, is not yet thoroughly understood in the United States. It should form the bond of union embracing the entire continental system, as the solar attraction forms the link uniting and directing the planets.

When that doctrine becomes the basis of the American continental system the suspicions of weak nations will disappear. Europe will establish like bonds for the nations composing that continent, thus facilitating in a large measure the relations between Europe and America. When this takes place, universal peace will have practical and beneficent results.

The nations forming the American continent will then have their court of arbitration to settle the internal questions of the hemisphere and to insure the continued independence of existing nationalities. The nations of Europe will also have their court of arbitration which will be governed by similar principles.

The work in America is easier for the reason that the systems of government existing in both portions of the continent, north and south of the Panama Canal, are all republican. There are no dynastic interests in America to object to the grand pact, which was foreseen with the clear vision of genius by Simon Bolivar.

American statesmen are, therefore, eminently correct in maintaining that the Monroe Doctrine cannot be reviewed in any judicial proceeding. It is the Political Constitution of the American Continent.

When these two continental courts of arbitration shall have been established, another court superior to them ought to be formed to resolve questions arising between continent and continent. Universal peace will thus be achieved, especially when martial nations become convinced that a supreme and irrevocable law forbids the creation of empires in which the sun never sets.

Humanity is discovering and conquering the forces of fraternity, the true ideals and principles that must serve as social links in the ages yet to come.

This naturally indicates the necessity of the primary school and of a programme whose inspiration is based upon profound truth and in the existence of a Supreme Being, who has organized and who directs all in conformity with the simple but divine law of universal gravitation.

THE END.

This book goes to press as the world is stricken with amazement by the *Titanic* tragedy, and as the bust of "La France," a gift from the great European Republic, is received by the great American Republic.

The author writes the last page of his work with the impressions of these two events on his mind.

The wireless, working like human nerves, recorded its C Q D as an eternal farewell to the dying vessel, horrifying humanity. Coal strikes, the Italian-Turkish war, presidential primary elections, and other matters of vital interest to the American people, were forgotten by press and public—to remember only the terrible shipwreck.

And the two great Republics, jointly, as brothers in success and calamity, with democratic ideals since independence days, are cementing their feelings and destinies more and more as the years pass by.

In the same manner that the human soul was formed, the soul of humanity is now forming with clear and well-defined characteristics and tendencies.



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